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Taking Stock: Virginia's Housing Inventory, 1980

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I. INTRODUCTION

This study uses data from the 1970 and 1980 decennial censuses of housing and population to describe how Virginia's housing inventory changed during the decade of the 1970s. Given that an area's housing stock is constantly fluctuating, it follows that changes measured over a ten-year period would be sizable. Indeed, the analysis that follows shows that, when compared to 1970, the state's housing characteristics were substantially different in 1980.

Although this analysis pertains primarily to housing characteristics and changes, it is difficult to separate housing trends from population trends. For the most part, housing added to the inventory at any given point in time reflects the needs of the population at that point. For example, if the population is particularly transient, more emphasis will be placed on providing rental housing than owner-occupied housing. In areas of declining population, housing units may be removed or converted to a new use to conform to the current demands. These same units may be converted back at a later time if the characteristics of the area again shift to being residential in nature. If lifestyles do not permit the time needed for upkeep and maintenance of the housing unit, families and individuals may turn to multifamily housing rather than a single family unit. In short, the population and market dynamics impacting housing characteristics are varied and complex.

This analysis is divided into four parts, each dealing with a different aspect of the state's inventory of dwelling units. The first section discusses the increase in units over the past decade, with an emphasis on areas of significant growth and development. Section two describes the structural characteristics of the inventory, including type of structure, age of housing, and size of units. The third part discusses occupancy characteristics and condition of housing, which include the mix of owners and renters, residential mobility, the extent overcrowding is a factor, and improvement to the housing stock as it relates to plumbing equipment, utility usage, and available amenities. Finally, the financial characteristics of the state's housing stock are discussed, including value of owner-occupied housing, rents, mortgage costs, and a comparison of ownership costs versus the costs associated with renting.

Although the analysis focuses on changes occurring between 1970 and 1980, it was sometimes necessary to obtain information as far back as the 1940 census in order to put current trends into proper perspective. Except where otherwise noted, all information presented in the tables was obtained from census publications entitled, General Housing Characteristics and Detailed Housing Characteristics, for Virginia.

Given the amount of data available on housing, it is not possible to address every characteristic or issue related to housing in an analysis of this magnitude. It is hoped, however, that this study will provide the reader with a clearer understanding of the topic as well as raise other interesting housing issues.

II. HOUSING GROWTH

During the decade of the 1970s, the number of housing units in the state of Virginia increased by slightly over 527,000 units, or an increase of 35.3 percent. According to census definitions, a housing unit is a "house, an apartment, a group of rooms, or a single room, occupied as a separate living quarter or, if vacant, intended for occupancy as a separate living quarter." [1]

It is important to note that the increase of 527,000 units represents a net gain to the state's housing inventory. Just as populations grow by natural increase--the excess of births over deaths--housing unit inventories expand by a similar process, the excess of new construction and other additions of dwelling units over demolitions and other types of unit losses. Each year, new units are constructed, mobile homes are moved into an area, buildings are converted from a nonresidential use to a residential use, and units are subdivided to form other housing units. At the same time, units are demolished or lost due to natural disasters, mobile homes are moved out of an area, residences are converted to commercial uses, and units are merged. Each of these processes affect an area's dwelling unit inventory and results in net changes to the size of the inventory.

Except for data on new construction, little information is available on many of these processes. However, using information on year of construction, it is possible to develop a rough measure of dwelling unit losses occurring during the decade. For instance, during the 1970s, nearly 616,500 housing units were constructed in Virginia. This total includes all units constructed since the 1970 census and still in existence at the time of the 1980 enumeration, and mobile homes constructed and moved into the state during the 1970s. It excludes conversions from nonresidential to residential use, unit subdivisions, and unit mergers, unless the original structure was built after the 1970 census. Given the construction of 616,500 units and a net increase of slightly over 527,000 units, it follows that approximately 90,800 dwelling units were removed from the state's housing inventory over the ten-year period.

Although it may be thought that demolitions account for a majority of this loss, information provided by local building officials to the Construction Division of the Bureau of the Census shows that only about 30,500 units were authorized for demolition between 1970 and 1980. Even though this figure may underestimate the number of actual demolitions due to reporting errors, it still appears that a majority of the units removed during the decade (approximately 60,300) were removed for reasons other than demolition, including fire or flood, becoming unfit for human habitation, changing to a nonresidential use, or being moved from the state.

Whatever the reason for the removal of a unit from an area's housing stock, it is important to take into account the removal of dwelling units when analyzing changes in the housing inventory. For example, the city of Norfolk had one of the lowest growth rates in housing among all of the state's jurisdictions, with a net gain of only 3,800 units or 4.2 percent. Year of construction data show, however, that 14,347 units were added to the inventory during the 1970s. If demolitions and other unit removals had not been taken into account, Norfolk's

dwelling unit inventory would have increased by nearly 16 percent as compared to 4.2 percent. Therefore, a low housing growth rate, although reflecting a lack of new housing development, may be misleading in terms of overall housing activity.

With respect to net gains in the state's housing unit inventory, Table 1 shows that the excess of new construction over demolitions and other losses during the 1970s resulted in the largest net gain of housing units in the state's history. As noted earlier, the state had a net gain of just over 527,000 units between 1970 and 1980. This increase during the latest ten-year period is actually larger than the state's total housing unit inventory in 1930, thereby reflecting the tremendous boom in housing development in Virginia over the past fifty years.

As Table 2 and Figure 1 show, housing unit inventories increased in all localities in the state between 1970 and 1980. However, the rate of increase varied widely among the localities, ranging from a gain of 128 percent in Spotsylvania County to only 2.6 percent in the city of Clifton Forge. On the whole, counties accounted for a larger number of new units than cities and had higher rates of growth. Slightly over 393,000 units were added to county inventories, an increase of 45.8 percent over 1970 totals, while nearly 134,000 units were added to housing stock in cities, an increase of only 21.0 percent.

In addition to showing that every county and city in the state added to its dwelling unit inventory during the decade, Figure 1 also shows that the localities experiencing the largest gains are generally concentrated in metropolitan areas. Six regions of particularly large increases in housing stock can be defined.

The first of these areas, the Northern Virginia region, had nine localities with growth rates of 50 percent or more. Adjoining the Northern Virginia area is the high-growth area surrounding Richmond City. Housing inventories in four counties, Hanover, New Kent, Powhatan, and Chesterfield, each increased by 50 percent or more, while other jurisdictions included in the Richmond area had increases of between a third and a half. Only the city of Richmond itself failed to show a sizable percentage increase in housing units. The Richmond region, in turn, adjoins a third growth area, the Peninsula portion of the state, which incorporates the Norfolk and Newport News metropolitan areas. Here, James City County, Gloucester County, and Virginia Beach City had dwelling unit increases of 50 percent or more, while the cities of Hampton, Newport News, and Suffolk experienced lower rates of increase.

A fourth area of the state in which significant housing increases occurred is Central Virginia, which includes the rapidly-developing counties of Greene, Albemarle, and Fluvanna, where housing growth exceeded 50 percent. Dwelling unit inventories in all other localities in this region, with the exception of the city of Charlottesville, increased by between a third and a half.

The fifth growth area includes the contiguous counties of Bedford, Roanoke, and Montgomery, each of which had growth rates of 50 percent or more. This high-growth area is surrounded by numerous localities with housing growth rates of a third to a half, including Amherst and Nelson counties.

The sixth growth area is comprised of Washington County, which is part of the Johnson City-Kingsport-Bristol Standard Metropolitan Statistical Area (SMSA) and Russell County to its north. These two localities had growth rates of just over 50 percent, while surrounding counties, as well as the city of Bristol itself, exhibited much lower growth rates.

For the most part, then, regions of the state experiencing sizable levels of new residential development are non-contiguous and tend to be centered in metropolitan areas. It is interesting to note, however, that independent cities located within these areas, as well as those scattered throughout the non-metropolitan sections of the state, accounted for little of the new growth. In fact, cities had the lowest housing growth rates in the state. This finding is not unexpected since cities were the first areas to develop and have little land available for new construction, particularly residential.

The data presented in this section have shown that Virginia's housing inventory during the 1970s, with respect to new construction and other housing processes, was dynamic and impacted on all parts of the state. The next section begins to describe the changes which occurred to the housing inventory as a result of this extensive housing activity.

Table 1. Total Dwelling Unit Inventory and Housing Unit Increases, Virginia, 1930-1980

Year	Total Inventory	Numeric Increase	Percent Change
1930	492,575	--	--
1940	659,787	167,212	34.0
1950	901,483	241,696	36.6
1960	1,168,913	267,430	29.7
1970	1,493,939	325,026	27.8
1980	2,020,941	527,002	35.3

Table 2. Change in the Number of Housing Units in Virginia Localities, 1970-1980

Locality	Number of Housing Units		Numeric Change 1970-1980	Percent Change 1970-1980
	1970	1980		
Counties:				
Accomack	11,729	13,815	2,086	17.8
Albemarle	11,738	20,363	8,625	73.5
Alleghany	4,128	5,433	1,305	31.6
Amelia	2,331	3,016	685	29.4
Amherst	6,966	9,672	2,706	38.8
Appomattox	3,303	4,509	1,206	36.5
Arlington	71,241	75,182	3,941	5.5
Augusta	14,016	19,613	5,597	39.9
Bath	2,240	2,537	297	13.3
Bedford	8,458	13,892	5,434	64.2
Bland	1,873	2,265	392	20.9
Botetourt	6,180	8,710	2,530	40.9
Brunswick	4,982	6,195	1,213	24.3
Buchanan	8,973	12,772	3,799	42.3
Buckingham	3,375	4,542	1,167	34.6
Campbell	10,955	16,341	5,386	49.2
Caroline	4,110	6,527	2,417	58.8
Carroll	8,128	11,685	3,557	43.8
Charles City	1,576	2,172	596	37.8
Charlotte	4,087	4,561	474	11.6
Chesterfield	22,554	48,883	26,329	116.7
Clarke	3,071	3,961	890	29.0
Craig	1,378	1,873	495	35.9
Culpeper	5,860	8,271	2,411	41.1
Cumberland	2,090	3,060	970	46.4
Dickenson	5,076	6,904	1,828	36.0
Dinwiddie	5,079	6,838	1,759	34.6
Essex	2,784	4,082	1,298	46.6
Fairfax	130,496	215,739	85,243	65.3
Fauquier	8,437	12,565	4,128	48.9
Floyd	3,613	4,915	1,302	36.0
Fluvanna	2,496	3,828	1,332	53.4
Franklin	9,164	13,512	4,348	47.4
Frederick	7,903	12,759	4,856	61.4
Giles	5,636	6,733	1,097	19.5

Table 2. (continued)

Locality	Number of Housing Units		Numeric Change 1970-1980	Percent Change 1970-1980
	1970	1980		
Gloucester	5,294	8,312	3,018	57.0
Goochland	2,873	4,031	1,158	40.3
Grayson	5,596	6,790	1,194	21.3
Greene	1,627	3,059	1,432	88.0
Greensville	2,824	3,792	968	34.3
Halifax	9,528	11,350	1,822	19.1
Hanover	10,948	17,278	6,330	57.8
Henrico	49,527	70,428	20,901	42.2
Henry	15,726	20,968	5,242	33.3
Highland	1,169	1,463	294	25.1
Isle of Wight	5,457	7,705	2,248	41.2
James City	5,073	8,672	3,599	70.9
King and Queen	1,831	2,510	679	37.1
King George	2,719	3,997	1,278	47.0
King William	2,417	3,441	1,024	42.4
Lancaster	3,940	5,107	1,167	29.6
Lee	7,289	9,659	2,370	32.5
Loudoun	11,381	19,742	8,361	73.5
Louisa	4,892	7,063	2,171	44.4
Lunenburg	3,999	4,808	809	20.2
Madison	3,001	3,997	996	33.2
Mathews	3,362	4,225	863	25.7
Mecklenburg	9,774	13,036	3,262	33.4
Middlesex	3,523	4,936	1,413	40.1
Montgomery	14,449	22,386	7,937	54.9
Nelson	4,010	5,500	1,490	37.2
New Kent	1,641	3,256	1,615	98.4
Northampton	5,798	6,132	334	5.8
Northumberland	4,339	5,584	1,245	28.7
Nottoway	4,787	5,619	832	17.4
Orange	4,918	7,358	2,440	49.6
Page	5,938	8,329	2,391	40.3
Patrick	5,491	7,054	1,563	28.5
Pittsylvania	17,958	24,255	6,297	35.1
Powhatan	1,968	3,838	1,870	95.0

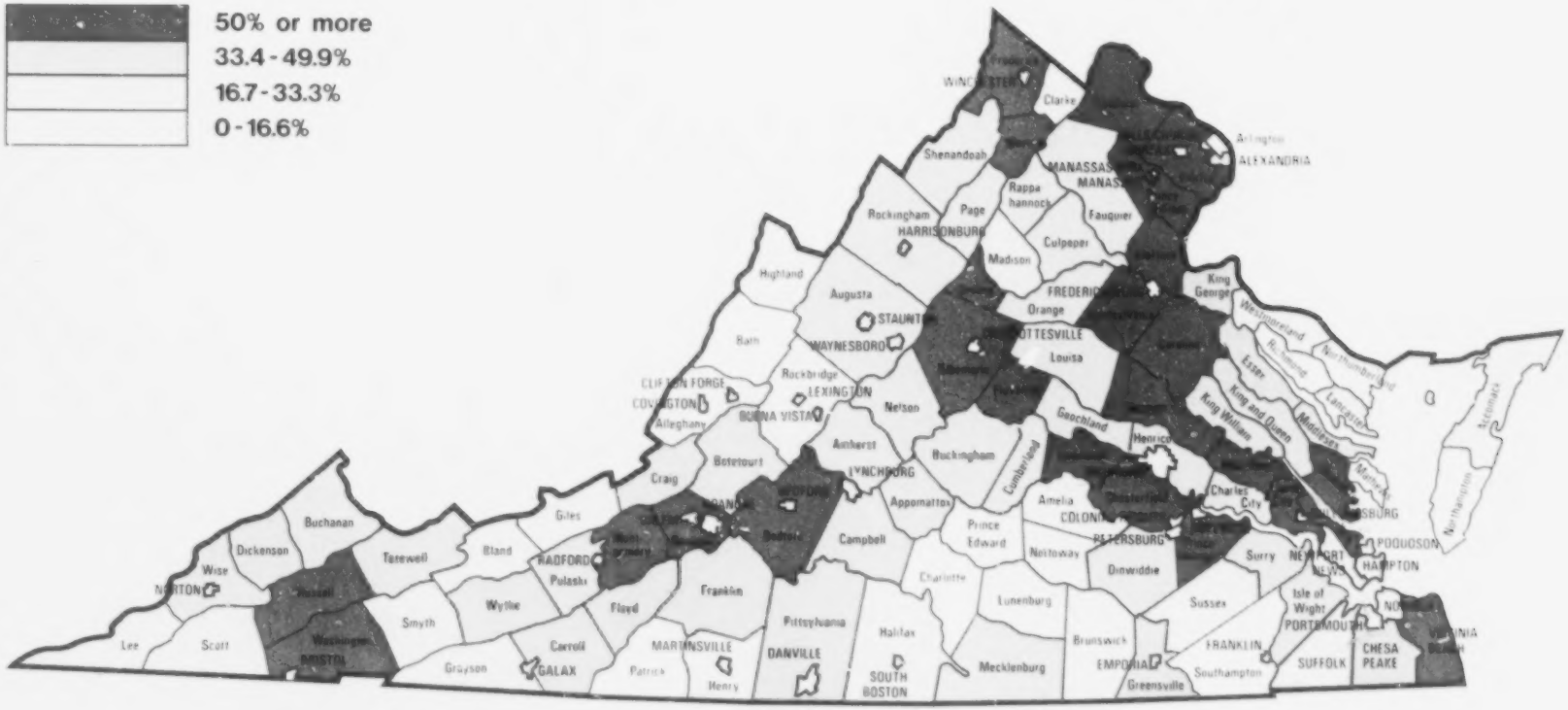
Table 2. (conti[illegible])

Locality	Number of Housing Units		Numeric Change 1970-1980	Percent Change 1970-1980
	1970	1980		
Prince Edward	4,376	5,548	1,172	26.8
Prince George	4,412	6,944	2,532	57.4
Prince William	25,070	46,490	21,420	85.4
Pulaski	10,055	13,736	3,681	36.6
Rappahannock	2,024	2,704	680	33.6
Richmond	2,373	3,007	634	26.7
Roanoke	17,143	26,800	9,657	56.3
Rockbridge	5,590	7,125	1,535	27.5
Rockingham	15,278	20,862	5,584	36.6
Russell	7,619	11,518	3,899	51.2
Scott	8,136	9,778	1,642	20.2
Shenandoah	8,773	12,000	3,227	36.8
Smyth	9,728	12,313	2,585	26.6
Southampton	5,440	6,256	816	15.0
Spotsylvania	5,196	11,850	6,654	128.1
Stafford	7,316	13,271	5,955	81.4
Surry	2,041	2,724	683	33.5
Sussex	3,257	3,958	701	21.5
Tazewell	12,878	18,274	5,396	41.9
Warren	5,992	9,516	3,524	58.8
Washington	11,588	17,884	6,296	54.3
Westmoreland	5,618	7,471	1,853	33.0
Wise	11,521	15,666	4,145	36.0
Wythe	7,274	9,833	2,559	35.2
York	7,815	11,427	3,909	52.0
Cities:				
Alexandria	44,433	52,041	7,608	17.1
Bedford	2,057	2,608	551	26.8
Bristol	7,003	7,744	741	10.6
Buena Vista	1,980	2,406	426	21.5
Charlottesville	14,291	15,998	1,707	11.9
Chesapeake	25,867	38,060	12,193	47.1
Clifton Forge	2,011	2,064	53	2.6
Colonial Heights	4,901	6,078	1,177	24.0
Covington	3,565	3,734	169	4.7
Danville	16,308	18,405	2,097	12.9

Table 2. (continued)

Locality	Number of Housing Units 1970	Number of Housing Units 1980	Numeric Change 1970-1980	Percent Change 1970-1980
Emporia	1,816	1,951	135	7.4
Fairfax	6,574	7,050	476	7.2
Falls Church	3,762	4,503	741	19.7
Franklin	2,206	2,688	482	21.8
Fredericksburg	4,813	6,347	1,534	31.9
Galax	2,278	2,811	533	23.4
Hampton	36,556	43,671	7,115	19.5
Harrisonburg	4,514	6,170	1,656	36.7
Hopewell	7,650	9,291	1,641	21.5
Lexington	2,260	2,389	129	5.7
Lynchburg	21,572	25,421	3,849	17.8
Manassas	3,279	5,511	2,232	68.1
Manassas Park	1,536	1,931	395	25.7
Martinsville	6,359	7,079	720	11.3
Newport News	41,692	54,994	13,302	31.9
Norfolk	91,061	94,871	3,810	4.2
Norton	1,505	1,839	334	22.2
Petersburg	14,495	16,139	1,644	11.3
Poquoson	1,739	2,954	1,215	69.9
Portsmouth	36,469	38,611	2,142	5.9
Radford	3,406	4,162	756	22.2
Richmond	87,027	91,527	4,500	5.2
Roanoke	37,775	42,690	4,915	13.0
Salem	6,932	9,017	2,085	30.1
South Boston	2,414	2,816	402	16.7
Staunton	7,740	8,630	890	11.5
Suffolk	13,865	16,719	2,854	20.6
Virginia Beach	47,957	92,032	44,075	91.9
Waynesboro	5,519	6,202	683	12.4
Williamsburg	2,591	3,041	450	17.4
Winchester	6,852	8,386	1,534	22.4
Total Counties	857,309	1,250,360	393,051	45.8
Total Cities	636,630	770,581	133,951	21.0
Total Virginia	1,493,939	2,020,941	527,002	35.3

Figure 1.
Percentage Increase in Housing Units by Locality, 1970-1980



III. STRUCTURAL CHARACTERISTICS OF HOUSING

During the decade of the 1970s, the state's housing inventory not only increased at a rapid rate, but also underwent changes in its structural characteristics. As the following analysis will show, housing changes during the decade included a trend toward higher density housing, construction of slightly larger units, and a change in the average age of the housing stock.

Types of Structures

The Bureau of the Census has defined several categories of housing units based on the number of units in the structure. Altogether, the Bureau identifies eight structure types: one-unit detached, one-unit attached, structures containing two units, three or four units, five to nine units, ten to 49 units, and 50 units or more, and mobile homes. One-unit detached structures are best characterized as single-family homes which share no walls with any other unit. A one-unit attached structure is probably best known as a townhouse, which shares a common wall with one or more other units. Two-unit structures are best described as duplex units. Duplex units, in addition to having a common wall, also share a common roof. Structures containing three units or more are commonly known as multifamily housing and may take the form of low-rise garden-type apartments, mid-rise apartments which contain an elevator, or high-rise apartments.

Structure types are often defined in terms of levels of density. The density levels indicate the number of units constructed on a given size piece of property. For example, single-family detached units usually have the lowest density levels since each unit is normally built on an acre of land or more. Townhouse units may be constructed five to an acre, a moderate type of density, while multifamily housing has the highest density levels. In this study, low density refers to single-family detached units, moderate density to townhouse and duplex units, and high density to multifamily housing of three units or more.

Total Year-Round Units. Table 3 shows a preponderance of single-family detached housing units in the state's dwelling unit inventory. Year-round units are those intended for year-round occupancy and, therefore, exclude housing intended for seasonal use or units held for migratory labor. Although single-family detached units had the largest numerical gain among the six categories of year-round units, their percentage of all units declined from 72 percent to 66 percent between 1970 and 1980. This decline as a percentage of the total is attributable to sizable numerical increases during the 1970s of other, higher density housing types. Such housing types included units in structures containing five units or more, the highest density category reported for all structure types, and single-family attached, or townhouse, units. Of the six structure types shown for all year-round units, the townhouse category exhibited the largest percentage gain between 1970 and 1980, reflecting a trend toward housing of moderate density. Units in structures of 3-4 units increased in number during the decade and exhibited a larger percentage change than single-family detached units, although their proportion of the total inventory remained unchanged at 3.8 percent.

Among all structure types, only those units in structures of two units exhibited both a numerical and a percentage decline between 1970 and 1980, decreasing by almost 7,000 units. Losses in two-unit structures may be due to two factors: (1) a large number of conversions of duplex units from residential use to a nonresidential use and (2) the propensity of builders to construct more profitable, higher-density housing on land formerly occupied by a two-unit structure.

One interesting characteristic of housing by structure type is the large increase in the number of mobile homes. Between 1970 and 1980, the number of mobile homes located in the state nearly doubled. This increase was due to a boom in mobile home construction and deliveries during the late 1960s and early 1970s. National statistics show that manufacturers' shipments of mobile homes, which had been averaging approximately 200,000 units per year and accounting for a fifth of all single-family unit construction, steadily increased to a point where nearly 600,000 were being shipped per year and were accounting for a third of all single-family unit construction. Since the peak years of 1972 and 1973, mobile home shipments have steadily declined to about 275,000 units per year, accounting for just less than a fifth of all new single-family unit construction. Although it might be hypothesized that the increase in mobile home shipments and purchases was due to rising interest rates for home mortgage loans, the trend in interest rates do not bear this out. While interest rates did show slight increases during the late 1960s and early 1970s, the rates did not begin to rise dramatically until the late 1970s, after the boom in mobile home shipments had ceased. In addition, as interest rates for home loans were increasing, interest rates on loans for mobile home purchases were also increasing at a rapid rate.

Figure 2 shows that the mix of structure types comprising Virginia's housing unit inventory is in a constant state of flux. While the 1970s exhibited some distinct trends--the boom in townhouse construction, declines in duplex units, and increases in high-density development--housing construction in earlier decades showed distinctly different characteristics. For example, three housing types have shown consistent upward trends in number of units since 1940. As might be expected, the number of single-family detached units has consistently increased over the past forty years. In addition to single-family detached housing, the number of units in both structures of five units or more and mobile homes have exhibited consistent numerical gains. The number of units in the remaining categories have fluctuated greatly from one census to the next. Townhouses, for example, although increasing numerically between 1970 and 1980, declined in number between 1960 and 1970 after registering a significant increase during the 1950s. Similarly, units in two-unit structures increased in number during the 1940s, reaching a peak of nearly 120,000 units according to the 1950 census, declined rapidly during the 1950s, increased slightly during the 1960s, and, as already noted, again declined in number during the 1970s.

Owner-Occupied Structures. In addition to providing information on all occupied housing units by structure type, Table 3 shows similar breakdowns for

owner-occupied units. An examination of changes in structural characteristics of owner-occupied units shows some similarities to trends in all year-round units, but also characteristics unique to ownership housing.

For owner-occupied units, single-family detached units again showed the largest numerical gain among the structure types and a decline in the number of units contained in structures of two units. Although the number of units contained in structures of three and four units also showed sizable increases, the number of units in structures of five or more showed the largest increase. In 1970, there were only 2,543 owner-occupied units in such structures. By 1980, this number had increased by over 28,900 units to nearly 31,500, an unbelievable increase of 1,137 percent in only ten years.

This increase in the highest density category clearly indicates a trend toward more owner-occupied multifamily housing. Such housing, which usually has less square footage than other structure types, is better suited to today's family structure and changing lifestyles. For example, households have declined in size appreciably over the past ten years and an increasing number of households have two working wage earners. The result is a demand for housing with reduced living space and requiring less or no exterior maintenance. This demand is reflected in the increased supply of multifamily, condominium housing during the 1970s, most of which is owner-occupied. In 1970, the census identified 1,888 condominium units in the state. By 1980, the number of condominium units had increased to over 48,100 units, a gain of 1,566 percent.

A condominium may be of any structure type, but is characteristically a unit in multifamily housing. It reflects a type of ownership in which a person purchases an apartment or house in a development of similar units and holds joint ownership in common areas, including hallways, entrances, and elevators as well as playgrounds, lawns, and plantings. For the most part, responsibility for the maintenance and upkeep of the common areas is jointly held by all owners, who either share in the task of maintaining the area, or, as is usually the case, pay a condominium fee. This fee is then used to contract out the maintenance work. Services paid for from the condominium fee, which varies in amount depending on the extent of work or amenities covered, relieves the owner of personal responsibility for maintenance and upkeep.

In 1980, condominium units were found in 70 of Virginia's 136 counties and cities. In addition to metropolitan areas, Figure 3 shows that condominium units are also located in rural counties, although their numbers are appreciably smaller than those located in metropolitan areas. Clearly, however, the largest number of condominium units are located in major urban areas where high land costs and the declining supply of large tracts of vacant land make multifamily housing more feasible than single-family detached units. For example, of the 48,000 units counted in 1980, a third were located in Fairfax County alone, while the county of Arlington and city of Alexandria together accounted for nearly another one-third of the total. Other localities having a sizable number of condominium units include Henrico and Chesterfied counties in the Richmond SMSA, the city of Virginia Beach in the Norfolk-Virginia Beach-Portsmouth SMSA, and the city of Newport News in that metropolitan area.

Given the increase in high-density housing during the 1970s in owner-occupied units, it appears that the emergence of condominium ownership has contributed greatly to the change in mix of dwelling unit types. Nonetheless, owner-occupied multifamily housing still constitutes a small percentage of all owner-occupied units.

Renter-Occupied Structures. Whereas a majority of owner-occupied dwelling units are detached single-family units, renter-occupied housing units are usually characterized by high density housing. This characteristic did not change during the 1970s, except that even fewer units occupied by renters were in the category of single-family detached units. The number of rental units in this structure type declined by nearly 18,100 units between 1970 and 1980.

The decrease in renter-occupied single-family detached units most likely reflects the impact of increasing interest rates and housing values on monthly mortgage payments. The significant increase in the size of monthly mortgage payments, which will be described in a later section of this study, made it less feasible to purchase or hold single-family detached units as investment property to be rented. Before interest rates and housing values climbed during the 1970s, mortgage payments and rent levels were comparable. Because of this, it was possible for an individual to buy a home for the sole purpose of renting it out, thereby taking advantage of tax benefits. However, once mortgage payments soared with the increase in interest rates, it was less likely that the property owner could cover his mortgage payment from the rent paid to him by his tenant.

While the number of renter-occupied single-family detached units was declining, all other structure types, except those containing two units, increased. Units in structures of 10-49 units experienced the largest numerical change among all structure types, followed by one-unit attached structures and structures with 5-9 units. The largest percentage gain, however, was in the category of mobile homes, which increased from nearly 7,900 units in 1970 to over 17,700 units in 1980, an increase of 125 percent. Since the number of rental units in the category of single-family detached declined, the large increase in rental mobile homes may reflect an attempt by renter households to retain the semblance of a detached housing unit while keeping their rental costs to a minimum.

Structure Type by Locality. Between 1970 and 1980, changes in dwelling unit types were not uniform throughout the state. Table 4 provides a breakdown of units by structure type for all counties and independent cities in Virginia and the numerical change between 1970 and 1980. In addition, Figures 4 through 6 graphically depict the increases and declines by unit type. Figure 4 shows that areas experiencing high levels of new single family construction--increases of 2,000 units or more--were located primarily in metropolitan areas or adjacent localities. Areas experiencing moderate increases of 1,000 to 1,999 units were, for the most part, located on the outskirts of the state's metropolitan areas, where significant new population growth is taking place. The localities exhibiting little or no new construction of single-family units are more rural and more distant from major cities and metropolitan areas. Only two jurisdictions, the cities of Richmond and Emporia, experienced a net loss of single-family units between 1970 and 1980.

Figure 5 shows that, as might be expected, construction of multifamily units occurs almost exclusively in metropolitan areas. All localities experiencing increases of 2,000 units or more since 1970 are located in metropolitan areas. Although construction of multifamily housing is a metropolitan characteristic, not all metropolitan areas in the state experienced increases in such housing. As Figure 5 shows, construction of new multifamily housing during the 1970s occurred primarily in the Northern Virginia, Richmond, Norfolk, Newport News, Charlottesville, and Roanoke metropolitan areas. The Danville SMSA experienced only a moderate increase in multifamily housing, while in the Petersburg-Colonial Heights-Hopewell SMSA, only the city of Petersburg showed a sizable increase. In fact, the number of multifamily housing units in Dinwiddie County, which is part of the Petersburg metropolitan area, actually declined between 1970 and 1980. The same was also true for the city of Portsmouth in the Norfolk-Virginia Beach-Portsmouth SMSA.

While multifamily development occurred predominantly in metropolitan areas, mobile homes are found in every locality, although in varying numbers. Figure 6 shows that localities experiencing increases of 1,000 or more mobile homes were grouped in two non-contiguous areas. The first area, the southwest portion of the state, includes seven jurisdictions. The other area includes the counties of Bedford, Campbell, and Franklin, and the city of Danville. Although the counties located in these two areas showed sizable increases in the number of new mobile homes, the cities situated within these two areas exhibited either smaller increases or actual declines. Areas exhibiting more moderate increases were generally scattered throughout the state and range from such diverse localities as the city of Virginia Beach, a rapidly-growing area in a major metropolitan area, to some of the state's more rural counties.

Size of Housing Units

Because the characteristics of the state's housing inventory as described by structure type clearly indicate a trend toward higher density housing, it was expected that the median size of units would decline overall, since multifamily housing units tend to be smaller than other structure types. As Table 5 shows, however, the median number of rooms per unit actually increased from 5.2 rooms in 1970 to 5.5 rooms per unit in 1980, a continuation of a trend dating back to the 1950s. This increase may seem insignificant, but considering the size of the inventory and large number of high-density units added to the inventory during the 1970s, the increase is indeed significant and unexpected. It is also important to point out that square footage information shows that, not only are the size of units increasing in terms of number of rooms, but also with respect to actual amount of living space.[2]

Leading the increase in median rooms per unit was the category of units containing eight rooms or more. Between 1970 and 1980, this category had not only the largest percentage gain among the various categories, but also the largest numerical increase, nearly doubling in number. This trend toward units with more rooms appears to be inconsistent with other demographic trends, most

notably the trend toward smaller households. For example, between 1970 and 1980, household size in the state of Virginia declined from 3.20 persons per household to 2.77 persons per household. This decline, which was in evidence nationwide, was brought about by such demographic trends as higher incidence of divorce and separation, lower fertility due to postponement of marriage and the need for two incomes, and greater numbers of elderly continuing to live in their homes rather than institutions for the elderly. Given the magnitude of this trend toward smaller households, as well as such other factors as increasing energy costs, most analysts believed that the size of the nation's housing units would decrease, much as the downsizing of automobiles occurred as the price of gasoline increased and families became smaller. Such a reduction in dwelling unit size, however, did not materialize during the 1970s.

The apparent inconsistency of larger units being built to accommodate smaller households is not confined to any one area or type of area in the state. Table 6 shows that the increase in median number of rooms coupled with declines in household size was a state-wide trend. All cities and counties in Virginia, with the exception of the county of York and Suffolk City, exhibited increases or a stabilization of median number of rooms between 1970 and 1980. At the same time, the average number of persons per household was declining in all jurisdictions. It appears that persons, in general, given the increase in size of dwelling units and the decrease in number of persons per household, are "spreading out" within their housing units.

Age of Housing

The final structural characteristic discussed here is the age of housing. In general, the state's housing stock has become progressively "younger" over the past forty years. As Figure 7 shows, the median age of housing in Virginia has declined from 25 years in 1940 to 18 years in 1980. Most of this decline in median age of the state's dwelling unit inventory occurred during the decade of the 1950s, due primarily to significant levels of new construction.

This reverse aging process in Virginia's housing stock follows the same general pattern as that of the nation as a whole. Both inventories have become younger since 1940, although Virginia's housing stock has exhibited a more pronounced change. As of 1980, dwelling units in Virginia were approximately five years younger than housing units in the entire country.

Table 7 shows the distribution of housing units as of 1980 by the year in which the unit was built. As the table shows, nearly a third of the 2,000,075 year-round units enumerated in 1980, or nearly 618,000 units, were built in the ten years preceding the census. Of these, over 75,000 units were constructed between January 1979 and March 1980, representing 3.8 percent of all units. Slightly under 23 percent were built between 1960 and 1969, while 17 percent, or nearly 340,000 units, were built during the 1950s. Approximately 12 percent of the units were built between 1940 and 1949, while the remaining 353,600 units, accounting for 17.7 percent of the total, were constructed prior to 1940.

Table 8 provides the breakdown of year-round units by year built for all counties and cities in the state. In addition, the table shows the median age of housing for each jurisdiction. The data presented in the table indicate extreme variations among jurisdictions both in terms of levels of new construction as well as age of housing. For example, the locality adding the largest number of units in the fifteen-month period preceding the census was Fairfax County in which slightly over 14,000 units were built. Amazingly, this increase in units built in slightly over one year's time exceeds total housing inventories in 104 other localities. Chesterfield County was second in new units added during this period. Its increase of 4,780 units was far below that of the increase in Fairfax County. At the other extreme, several localities added relatively few units, most of them small cities in which little new construction would be expected, due to lack of available land for development and an absence of new nonresidential development which would increase the demand for new housing.

As would be anticipated, jurisdictions exhibiting sizable levels of new residential development have relatively young housing inventories, some with median ages of ten years or less. Conversely, localities experiencing little new construction have older inventories, some with a median age of forty years or more.

In general, housing located in cities, with a median age of 22 years as of 1980, is six years older than housing located in counties, which has a median age of 16 years. As Figure 8 shows, however, there are age distinctions among the counties. For example, the housing stock in counties adjoining independent cities is, on the average, ten years younger than the housing stock in the independent cities, or in counties that are not contiguous to cities. This is due to patterns of development in which cities grew and expanded before the surrounding counties due to employment opportunities, proximity to work, availability of housing, and access to public transportation. At the same time, counties which are not contiguous to cities have really yet to develop and, therefore, tend to have housing inventories which are similar in age to cities. Should these distant counties begin to experience significant new residential development, as has been the case in Stafford County, the median age of their housing inventories should begin to decline.

The result of these different growth patterns is a tiered effect in which city housing stock tends to be older than housing units in the more recently developed adjacent counties, while units located in the less-developed fringe tier of counties have age characteristics similar to that found in cities. This tiered effect has been analyzed and described in numerous studies and found to be a typical development pattern in most urban areas, not only those in Virginia but also elsewhere in the nation.

One interesting point raised by an examination of age of housing concerns housing survival or the extent units are removed from the inventory and replaced by newer ones. Table 9, which provides a description of changes in the number of dwelling units by year built from 1940 to 1980, shows that the trends are

suprisingly consistent from one decade to the next. As the table shows, of the units in existence in 1940, approximately 70 percent were still in the inventory by 1950 or within ten years following the 1940 census. Within twenty years, only half of the original units remained, while thirty years later approximately 30 percent of the units remained. Based on results from the 1980 census, less than 20 percent of the units which existed in 1940 were still in existence forty years later. This same pattern, with very little variation, is also evident for units enumerated in succeeding decades.

While the percentage of units removed from the total inventory remains fairly constant, the actual number of units removed varies greatly from one decade to the next. This is not unexpected given that the size of the inventory increases from one decade to the next. For example, between 1940 and 1950, 41,262 units built before 1940 were removed from the inventory. Between 1950 and 1960 this number increased to nearly 59,000 and to over 105,000 units between 1960 and 1970. The number of units removed is highest for the decade of the 1960s, perhaps reflecting the impact of urban renewal, a process in which thousands of units were razed and replaced with newly constructed units. During the 1970s, however, the number of units removed declined from the 1960 levels, perhaps reflecting the trend toward gentrification, a relatively new process in which units are renovated rather than razed.

The consistency of the pattern of removals may permit planners to project the age make-up of the state's dwelling unit inventory and the number of units needed to replace those removed from the inventory and to accommodate new household formations.

This section has described the structural characteristics of the state's dwelling unit inventory. In the next section, the analysis is taken a step further by examining occupancy characteristics and the related component of housing condition.

Table 3. Units in Structure by Tenure, Virginia, 1970 and 1980

	1970		1980		Numeric Change 1970-1980	Percent Change 1970-1980
	Number	Percent	Number	Percent		
Total Year-Round:						
1 detached	1,061,247	71.5	1,309,208	65.5	247,961	23.4
1 attached	48,374	3.3	128,540	6.3	80,166	165.7
2	74,431	5.0	67,492	3.4	-6,939	-9.3
3 and 4	56,731	3.8	75,014	3.8	18,283	32.2
5 or more	193,748	13.0	324,361	16.2	130,613	67.4
Mobile home	50,421	3.4	95,460	4.8	45,039	89.3
Owner-Occupied:						
1 detached	784,333	90.9	1,040,691	85.2	256,358	32.7
1 attached	14,308	1.7	58,462	4.8	44,154	308.6
2	16,029	1.8	14,757	1.2	-1,272	-8.0
3 and 4	3,408	0.4	7,961	0.6	4,553	133.6
5 or more	2,543	0.3	31,467	2.6	28,924	1,137.4
Mobile home	42,543	4.9	68,252	5.6	25,709	60.4
Renter-Occupied:						
1 detached	210,284	39.8	192,190	29.9	-18,094	-8.6
1 attached	31,430	6.0	60,963	9.5	29,533	94.0
2	52,227	9.9	45,815	7.1	-6,412	-12.3
3 and 4	48,508	9.2	59,613	9.3	11,105	23.0
5-9	57,063	10.8	82,638	12.9	25,575	44.8
10-49	82,617	15.7	121,780	19.0	39,163	47.4
50 or more	37,464	7.1	60,744	9.5	23,260	62.1
Mobile home	7,878	1.5	17,740	2.8	9,862	125.2

Figure 2.
Number of Units by Structure Type, Virginia, 1940-1980

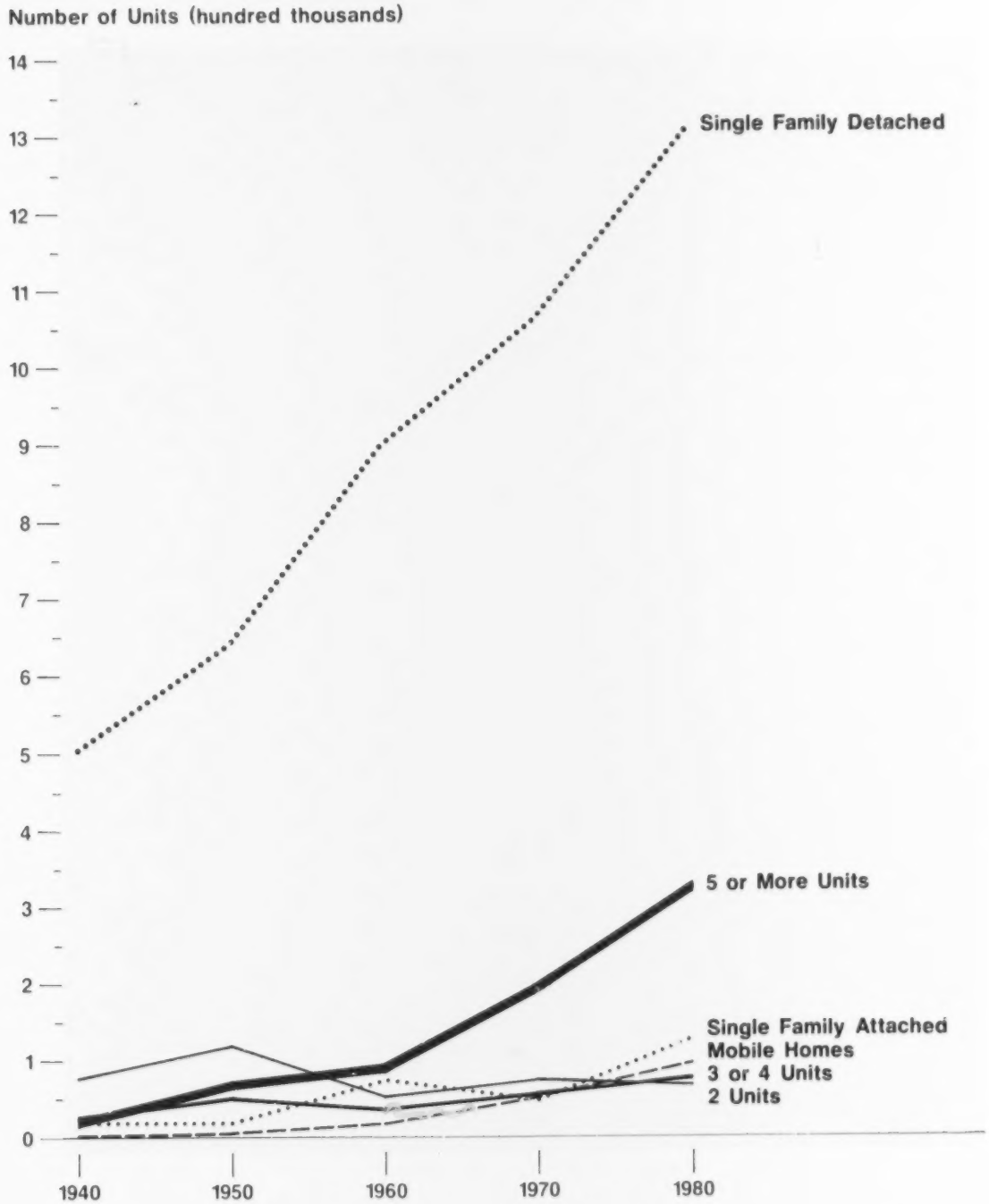


Figure 3.
Condominium Housing by Locality, 1980

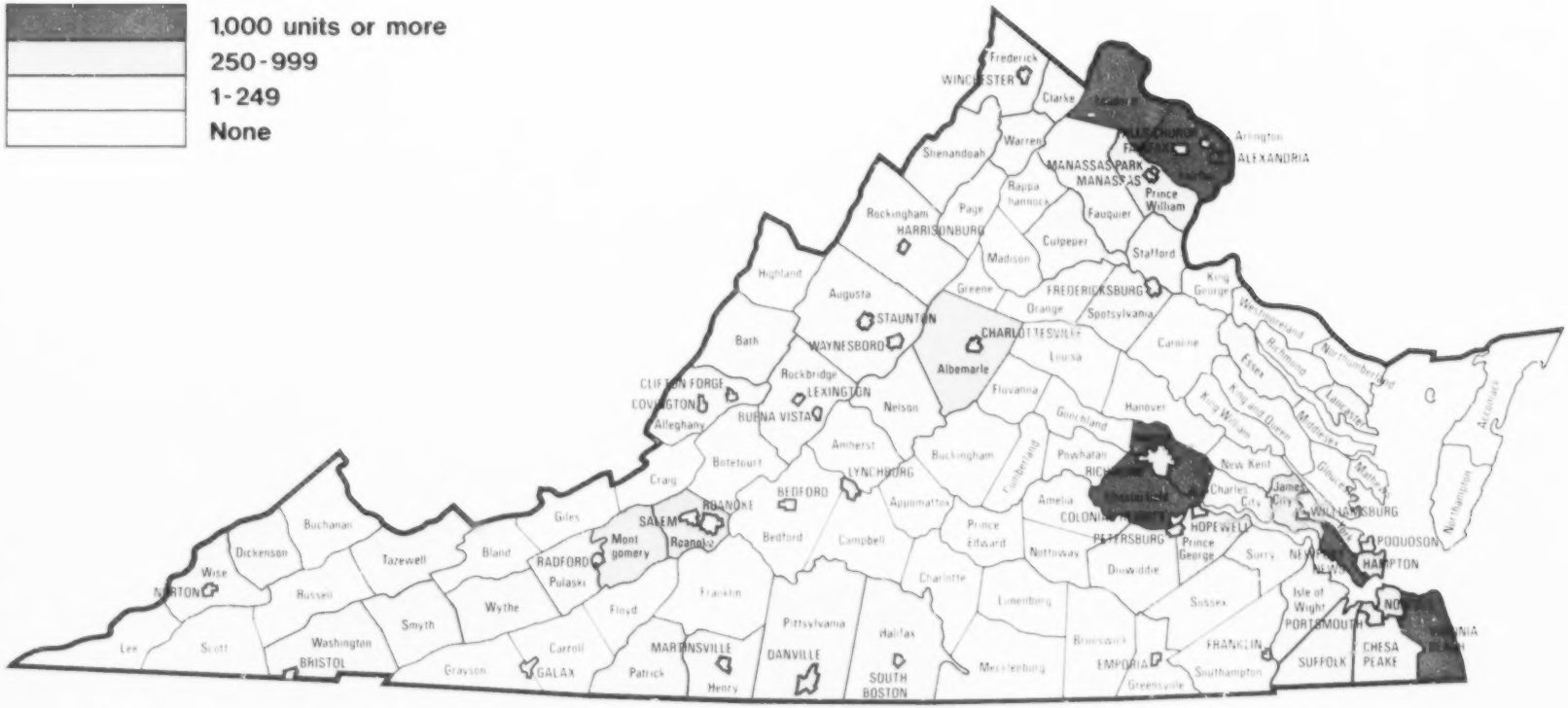


Table 4. Distribution of Units by Dwelling Unit Type in Virginia Localities, 1970 and 1980

Locality	1970						1980	
	Single Family		Multifamily		Mobile Home		Single Family	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Counties:								
1. Accomack	10,415	91.3	427	3.7	567	5.0	11,165	84.9
2. Albemarle	9,041	77.2	1,878	16.0	785	6.7	13,895	68.6
3. Alleghany	3,673	90.8	143	3.5	230	5.7	4,523	85.3
4. Amelia	2,099	90.2	73	3.1	154	6.7	2,368	79.6
5. Amherst	6,005	86.4	555	8.0	388	5.6	7,912	82.7
6. Appomattox	2,910	88.4	189	5.7	194	5.9	3,709	83.6
7. Arlington	29,811	41.8	41,373	58.1	41	0.1	31,668	42.1
8. Augusta	12,196	88.5	742	5.4	841	6.1	16,110	83.1
9. Bath	1,714	82.5	254	12.2	109	5.3	1,958	82.7
10. Bedford	7,804	90.7	211	2.4	591	6.9	10,830	82.5
11. Bland	1,678	90.2	37	2.0	139	7.7	1,866	85.6
12. Botetourt	5,387	87.8	321	5.2	425	6.9	7,163	84.6
13. Brunswick	4,463	89.9	255	5.1	245	4.9	4,685	81.2
14. Buchanan	7,770	86.6	358	4.0	845	9.4	9,292	72.8
15. Buckingham	3,016	89.7	69	2.0	278	8.3	3,680	81.6
16. Campbell	11,455	84.0	1,046	7.7	1,134	8.3	12,407	76.4
17. Caroline	3,627	88.2	198	4.8	285	6.9	5,165	80.7
18. Carroll	7,425	92.0	160	2.0	482	6.0	9,440	84.5
19. Charles City	1,407	89.7	0	0.0	161	10.3	1,694	79.4
20. Charlotte	3,515	92.9	79	2.1	189	5.0	3,810	84.4
21. Chesterfield	18,470	82.1	2,632	11.7	1,387	6.2	40,015	81.9
22. Clarke	2,580	90.3	238	8.3	39	1.4	3,448	89.4
23. Craig	1,269	92.4	26	1.9	78	5.7	1,346	79.8
24. Culpeper	4,939	84.4	571	9.8	340	5.8	6,633	80.4
25. Cumberland	1,940	93.4	40	1.9	96	4.6	2,445	81.5
26. Dickenson	4,679	91.6	143	2.8	284	5.6	5,168	74.9
27. Dinwiddie	4,925	80.5	848	13.9	347	5.7	5,745	85.0
28. Essex	2,210	87.9	135	5.4	168	6.7	2,801	79.3
29. Fairfax	95,866	73.3	33,207	25.4	1,695	1.3	154,405	71.6
30. Fauquier	7,383	87.6	975	11.6	66	0.8	10,812	86.4
31. Floyd	3,332	92.6	82	2.3	184	5.1	4,099	85.8
32. Fluvanna	2,194	88.9	96	3.9	178	7.2	3,252	85.6
33. Franklin	7,517	89.3	407	4.7	496	5.9	10,254	79.5
34. Frederick	8,139	85.9	526	5.6	812	8.6	10,032	81.7
35. Giles	4,905	87.3	367	6.5	346	6.2	5,566	83.8

Table 4. (continued)

1980				Numeric Change 1970-1980			
Mulitfamily		Mobile Home					
Number	Percent	Number	Percent	SF	MF	MH	
759	5.8	1,225	9.3	750	332	658	1.
5,086	25.1	1,268	6.3	4,854	3,208	483	2.
259	4.9	520	9.8	850	116	290	3.
155	5.2	453	15.2	269	82	299	4.
878	9.2	782	8.2	1,907	323	394	5.
208	4.7	519	11.7	799	19	325	6.
43,468	57.8	39	0.1	1,857	2,095	-2	7.
1,944	10.0	1,337	6.9	3,914	1,202	496	8.
196	8.3	213	9.0	244	-58	104	9.
691	5.3	1,608	12.2	3,026	480	1,017	10.
36	1.7	277	12.7	238	-1	135	11.
541	6.4	763	9.0	1,776	220	338	12.
449	7.8	632	11.0	222	194	387	13.
516	4.0	2,956	23.2	1,522	158	2,111	14.
220	4.9	610	13.5	664	151	332	15.
1,319	8.1	2,508	15.4	952	273	1,374	16.
393	6.1	841	13.1	1,538	195	556	17.
586	5.2	1,150	10.3	2,015	426	668	18.
175	8.2	264	12.4	287	175	103	19.
264	5.9	439	9.7	295	185	250	20.
6,874	14.1	1,989	4.1	21,545	4,242	602	21.
329	8.5	82	2.1	863	91	43	22.
108	6.4	233	13.8	77	82	155	23.
1,087	13.2	527	6.4	1,694	516	187	24.
210	6.9	347	11.6	505	170	251	25.
349	5.1	1,382	20.0	539	206	1,098	26.
380	5.6	634	9.4	820	-468	287	27.
341	9.7	389	11.0	591	206	221	28.
59,177	27.4	2,089	1.0	58,539	25,970	394	29.
1,516	12.1	189	1.5	3,429	541	123	30.
141	2.9	539	11.3	767	59	355	31.
233	6.1	314	8.3	1,058	137	136	32.
1,106	8.5	1,546	12.0	2,737	699	1,050	33.
830	6.7	1,420	11.6	1,893	304	608	34.
390	5.9	684	10.3	661	23	338	35.

Table 4. (continued)

Locality	1970							
	Single Family		Multifamily		Mobile Home		Single Family	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
36. Gloucester	4,643	90.4	174	3.4	318	6.2	6,282	79.7
37. Goochland	2,573	89.7	64	2.2	232	8.1	3,483	87.3
38. Grayson	5,086	91.2	191	3.4	298	5.3	5,584	84.7
39. Greene	1,349	82.9	92	5.6	186	11.4	2,320	80.9
40. Greensville	2,655	94.0	15	0.5	154	5.4	3,134	83.2
41. Halifax	8,666	91.2	273	2.9	560	5.9	9,330	82.9
42. Hanover	10,004	91.5	432	4.0	500	4.6	15,477	89.8
43. Henrico	41,109	82.9	8,269	16.7	130	0.3	53,373	75.8
44. Henry	13,468	85.7	777	4.9	1,471	9.4	16,799	80.2
45. Highland	1,026	89.8	40	3.5	76	6.6	1,209	84.0
46. Isle of Wight	4,594	84.8	383	7.1	439	8.1	6,234	81.5
47. James City	3,557	70.8	726	14.5	738	14.7	5,936	69.6
48. King & Queen	1,741	95.9	0	0.0	75	4.1	1,958	85.5
49. King George	2,189	82.6	167	6.3	293	11.1	3,098	78.6
50. King William	2,127	88.9	164	6.8	102	4.3	2,951	87.2
51. Lancaster	3,469	91.7	71	1.9	244	6.4	3,967	86.8
52. Lee	6,883	94.4	217	3.[illegible]	189	2.6	7,994	[illegible]2.8
53. Loudoun	10,241	90.3	880	7.8	225	2.0	16,801	85.[illegible]
54. Louisa	4,393	90.7	170	3.5	280	5.8	5,096	76.1
55. Lunenburg	3,784	94.7	87	2.2	123	3.1	4,106	85.7
56. Madison	2,626	89.9	140	4.8	157	5.4	3,321	87.0
57. Mathews	2,638	90.5	70	2.4	206	7.1	3,153	87.1
58. Mecklenburg	8,692	89.7	548	5.7	450	4.6	10,025	82.6
59. Middlesex	2,559	93.4	83	3.0	99	3.6	2,993	85.3
60. Montgomery	9,015	61.9	3,747	25.8	1,792	12.3	12,514	56.0
61. Nelson	3,613	90.5	87	2.2	293	7.3	4,137	85.8
62. New Kent	1,396	86.1	18	1.1	208	12.8	2,696	84.9
63. Northampton	4,854	88.8	449	8.2	165	3.0	5,011	82.9
64. Northumberland	3,730	92.2	62	1.5	255	6.3	3,988	87.6
65. Nottoway	4,206	88.2	316	6.6	244	5.1	4,778	84.3
66. Orange	4,398	89.4	301	6.1	219	4.5	5,925	80.8
67. Page	5,126	87.4	394	6.7	344	5.9	6,817	84.6
68. Patrick	4,754	89.3	117	2.2	453	8.5	5,651	82.9
69. Pittsylvania	16,187	91.1	552	3.1	1,221	6.8	19,235	80.7
70. Powhatan	1,731	88.6	59	3.0	164	8.4	3,530	92.3
71. Prince Edward	3,635	83.2	540	12.4	196	4.5	4,311	77.9
72. Prince George	3,619	61.8	1,161	19.8	1,078	18.4	4,560	65.7
73. Prince William	19,566	76.8	4,641	18.2	1,284	5.0	36,927	79.5
74. Pulaski	7,957	80.5	1,061	10.7	871	8.8	10,005	75.9
75. Rappahannock	1,824	93.8	72	3.7	48	2.5	2,296	88.1

Table 4. (continued)

1980				Numeric Change 1970-1980			
Mulitfamily		Mobile Home					
Number	Percent	Number	Percent	SF	MF	MH	
653	8.3	943	12.0	1,639	479	625	36.
129	3.2	379	9.5	910	65	147	37.
259	3.9	749	11.4	498	68	451	38.
218	7.6	331	11.5	971	126	145	39.
127	3.4	506	13.4	479	112	352	40.
617	5.5	1,304	11.6	664	344	744	41.
1,273	7.4	482	2.8	5,473	841	-18	42.
16,821	23.9	216	0.3	12,264	8,552	86	43.
1,923	9.2	2,213	10.6	3,331	1,146	742	44.
59	4.1	171	11.9	183	19	95	45.
407	5.3	1,012	13.2	1,640	24	573	46.
1,402	16.5	1,186	13.9	2,379	676	448	47.
69	3.0	262	11.5	217	69	187	48.
346	8.8	497	12.6	909	179	204	49.
255	7.5	178	5.3	824	91	76	50.
280	6.1	323	7.1	498	209	79	51.
415	4.3	1,243	12.9	1,111	198	1,054	52.
2,652	13.5	213	1.1	6,560	1,772	-12	53.
435	6.5	1,165	17.4	793	265	885	54.
272	5.7	413	8.6	322	185	290	55.
244	6.4	253	6.6	697	104	96	56.
152	4.2	316	8.7	515	82	110	57.
735	6.1	1,369	11.3	1,333	187	919	58.
212	6.0	304	8.7	434	129	205	59.
7,137	32.0	2,684	12.0	3,499	3,390	892	60.
319	6.6	368	7.6	524	232	75	61.
150	4.7	330	10.4	1,300	132	122	62.
508	8.4	523	8.7	157	59	358	63.
214	4.7	351	7.7	258	152	96	64.
491	8.8	390	7.0	522	175	146	65.
773	10.6	630	8.6	1,526	472	411	66.
573	7.1	672	8.3	1,691	179	328	67.
426	6.3	737	10.8	897	309	284	68.
1,552	6.5	3,036	12.7	3,048	1,000	1,815	69.
145	3.8	148	3.9	1,799	86	-16	70.
703	12.7	517	9.3	676	163	321	71.
1,494	21.6	882	12.7	941	333	-196	72.
8,189	17.6	1,316	2.8	17,361	3,548	32	73.
1,992	15.1	1,191	9.0	2,048	931	320	74.
277	10.6	33	1.3	472	205	-15	75.

Table 4. (continued)

Locality	1970							
	Single Family		Multifamily		Mobile Home		Single Family	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
76. Richmond	1,894	92.3	62	3.0	95	4.6	2,490	89.3
77. Roanoke	18,530	87.3	1,845	8.7	849	4.0	21,149	79.1
78. Rockbridge	4,966	89.5	257	4.6	328	5.9	5,739	81.9
79. Rockingham	12,598	83.4	1,353	9.0	1,151	7.6	16,373	80.0
80. Russell	6,864	90.2	259	3.4	484	6.4	8,850	76.8
81. Scott	7,447	91.7	248	3.0	429	5.3	8,178	84.0
82. Shenandoah	7,653	87.8	813	9.3	250	2.9	9,953	83.9
83. Smyth	8,416	87.0	463	4.8	798	8.2	9,936	81.5
84. Southampton	5,134	94.4	176	3.2	130	2.4	5,649	90.4
85. Spotsylvania	4,579	88.4	214	4.1	386	7.5	9,714	82.3
86. Stafford	5,939	81.6	386	5.3	952	13.1	11,424	86.9
87. Surry	1,761	91.2	47	2.4	122	6.3	2,073	85.6
88. Sussex	2,995	92.1	106	3.3	150	4.6	3,312	83.8
89. Tazewell	11,152	86.8	817	6.4	872	6.8	13,628	74.8
90. Warren	4,963	84.4	713	12.1	205	3.5	6,851	77.2
91. Washington	11,875	88.2	635	4.7	958	7.1	14,266	80.6
92. Westmoreland	4,826	93.1	135	2.6	221	4.3	5,227	86.6
93. Wise	10,055	87.3	688	6.0	769	6.7	11,353	72.6
94. Wythe	6,317	87.1	460	6.3	479	6.6	7,555	77.7
95. York	5,899	78.6	1,119	14.9	492	6.6	8,390	73.6
Cities:								
96. Alexandria	16,963	38.2	27,180	61.2	258	0.6	18,770	36.1
97. Bedford	1,581	76.9	422	20.5	54	2.6	1,832	70.2
98. Bristol	3,850	76.0	1,170	23.1	46	0.9	5,687	73.5
99. Buena Vista	1,697	85.7	264	13.3	19	1.0	1,991	82.8
100. Charlottesville	8,176	57.2	5,941	41.6	174	1.2	8,555	53.5
101. Chesapeake	21,719	84.0	3,080	11.9	1,064	4.1	30,265	79.6
102. Clifton Forge	1,562	77.7	443	22.0	6	0.3	1,579	76.5
103. Colonial Heights	4,238	86.5	655	13.4	4	0.1	5,110	84.1
104. Covington	2,858	80.2	640	18.0	67	1.8	2,885	77.5
105. Danville	12,065	74.1	4,059	24.9	167	1.0	13,365	72.6
106. Emporia	1,595	88.1	205	11.3	10	0.6	1,519	77.9
107. Fairfax	4,291	68.9	1,890	30.2	82	1.3	4,789	68.0
108. Falls Church	2,377	63.2	1,379	36.7	6	0.2	2,684	59.6
109. Franklin	1,581	71.7	625	28.3	0	0.0	2,018	75.1
110. Fredericksburg	3,192	66.4	1,557	32.4	57	1.2	3,556	56.2

Table 4. (continued)

1980				Numeric Change 1970-1980			
Mulitfamily		Mobile Home					
Number	Percent	Number	Percent	SF	MF	MH	
116	4.2	183	6.6	596	54	88	76.
4,985	18.6	616	2.3	2,619	3,140	-233	77.
642	9.2	623	8.9	773	385	295	78.
2,373	11.6	1,720	8.4	3,775	1,020	569	79.
611	5.3	2,057	17.9	1,986	352	1,573	80.
601	6.2	962	9.9	731	353	533	81.
1,269	10.7	643	5.4	2,300	456	393	82.
842	6.9	1,411	11.6	1,520	379	613	83.
195	3.1	407	6.5	515	19	277	84.
941	8.0	1,152	9.8	5,135	727	766	85.
560	4.3	1,162	8.8	5,485	174	210	86.
73	3.0	277	11.4	312	26	155	87.
219	5.5	421	10.6	317	113	271	88.
1,563	8.6	3,039	16.7	2,476	746	2,167	89.
1,533	17.3	490	5.5	1,888	820	285	90.
1,364	7.7	2,061	11.6	2,391	729	1,103	91.
271	4.5	536	8.9	401	136	315	92.
1,048	6.7	3,244	20.7	1,298	360	2,475	93.
799	8.2	1,366	14.0	1,238	339	887	94.
2,512	22.0	499	4.4	2,491	1,393	7	95.
33,195	63.8	57	0.1	1,807	6,015	-201	96.
730	28.0	46	1.8	251	308	-8	97.
1,832	23.7	222	2.9	1,837	662	176	98.
334	13.9	81	3.4	294	70	62	99.
7,242	45.3	183	1.1	379	1,301	9	100.
6,273	16.5	1,497	3.9	8,546	3,193	433	101.
473	22.9	12	0.6	17	30	6	102.
956	15.7	12	0.2	872	301	8	103.
680	18.3	156	4.2	27	40	89	104.
4,914	26.7	124	0.7	1,300	855	-43	105.
409	20.9	23	1.2	-76	204	13	106.
2,229	31.6	26	0.4	498	339	-56	107.
1,814	40.3	5	0.1	307	435	-1	108.
670	24.9	0	0.0	437	45	0	109.
2,719	43.1	47	0.7	364	1,162	-10	110.

Table 4. (continued)

Locality	1970							
	Single Family		Multifamily		Mobile Home		Single Family	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
111. Galax	1,839	80.7	295	13.0	144	6.3	2,040	72.9
112. Hampton	28,618	78.5	7,255	19.9	595	1.6	32,061	73.6
113. Harrisonburg	2,930	65.0	1,568	34.8	11	0.2	3,991	64.7
114. Hopewell	6,001	78.4	1,498	19.6	151	2.0	6,864	73.9
115. Lexington	1,514	67.4	698	31.1	34	1.5	1,549	64.8
116. Lynchburg	12,715	69.2	5,477	29.8	195	1.1	17,387	68.5
117. Manassas	2,070	72.5	598	21.0	186	6.5	4,123	74.8
118. Manassas Park	1,536	100.0	0	0.0	0	0.0	1,867	96.7
119. Martinsville	5,057	79.5	1,302	20.5	0	0.0	5,462	77.2
120. Newport News	27,776	66.6	12,444	29.8	1,468	3.5	34,296	62.4
121. Norfolk	50,418	55.4	39,621	43.5	950	1.0	52,168	55.0
122. Norton	1,086	75.6	296	20.6	54	3.8	1,222	66.5
123. Petersburg	8,364	69.7	3,630	30.2	5	0.1	11,036	68.4
124. Poquoson	1,615	94.2	67	3.9	32	1.9	2,665	90.6
125. Portsmouth	25,552	70.1	10,784	29.6	133	0.4	27,912	72.3
126. Radford	2,554	77.7	699	21.3	34	1.0	3,003	72.2
127. Richmond	52,427	60.2	33,950	39.0	691	0.8	52,052	56.9
128. Roanoke	22,554	67.1	11,023	32.8	41	0.1	28,044	65.7
129. Salem	5,200	75.2	1,294	18.7	424	6.1	6,178	68.5
130. South Boston	2,072	85.8	330	13.7	12	0.5	2,347	83.3
131. Staunton	5,994	77.4	1,715	22.2	31	0.4	6,573	76.3
132. Suffolk	11,844	85.5	1,724	12.4	289	2.1	14,039	84.0
133. Virginia Beach	37,368	78.7	8,452	17.8	1,644	3.5	65,753	71.9
134. Waynesboro	4,499	81.6	866	15.7	149	2.7	4,770	76.9
135. Williamsburg	1,332	51.4	1,235	47.7	24	0.9	1,476	48.5
136. Winchester	3,736	71.0	1,512	28.8	11	0.2	5,840	69.7
Total Counties	695,205	80.5	127,067	14.7	41,099	4.8	938,425	76.2
Total Cities	414,416	66.7	197,843	31.8	9,322	1.5	499,323	64.9
Total Virginia	1,109,621	74.7	324,910	21.9	50,421	3.4	1,437,748	71.9

Table 4. (continued)

1980				Numeric Change 1970-1980			
Mulitfamily		Mobile Home					
Number	Percent	Number	Percent	SF	MF	MH	
481	17.2	278	9.9	201	186	134	111.
10,773	24.7	728	1.7	3,443	3,518	133	112.
2,163	35.0	16	0.3	1,061	595	5	113.
2,310	24.8	117	1.3	863	812	-34	114.
807	33.8	33	1.4	35	109	-1	115.
7,504	29.5	502	2.0	4,672	2,027	307	116.
1,207	21.9	181	3.3	2,053	609	-5	117.
56	2.9	8	0.4	331	56	8	118.
1,607	22.7	5	0.1	405	305	5	119.
19,216	34.9	1,474	2.7	6,520	6,772	6	120.
41,778	44.1	876	0.9	1,750	2,157	-74	121.
370	20.1	247	13.4	136	74	193	122.
4,821	29.8	282	1.8	2,672	1,191	277	123.
173	5.9	105	3.5	1,050	106	73	124.
10,503	27.2	170	0.4	2,360	-281	37	125.
1,045	25.1	114	2.7	449	346	80	126.
38,677	42.3	751	0.8	-375	4,727	60	127.
14,412	33.8	230	0.5	5,490	3,389	189	128.
2,468	27.4	367	4.1	978	1,174	-57	129.
449	15.9	20	0.7	275	119	8	130.
2,023	23.5	21	0.2	579	308	-10	131.
2,215	13.3	455	2.7	2,195	491	166	132.
23,456	25.6	2,231	2.4	28,385	15,004	587	133.
1,237	20.0	195	3.1	271	371	46	134.
1,527	50.2	38	1.3	144	292	14	135.
2,490	29.7	52	0.6	2,104	978	41	136.
208,629	17.0	83,473	6.8	243,220	81,562	42,374	
258,238	33.6	11,987	1.5	84,907	60,395	2,665	
466,867	23.3	95,460	4.8	328,127	141,957	45,039	

Figure 4.
Numerical Change in Single-Family Units by Locality, 1970-1980

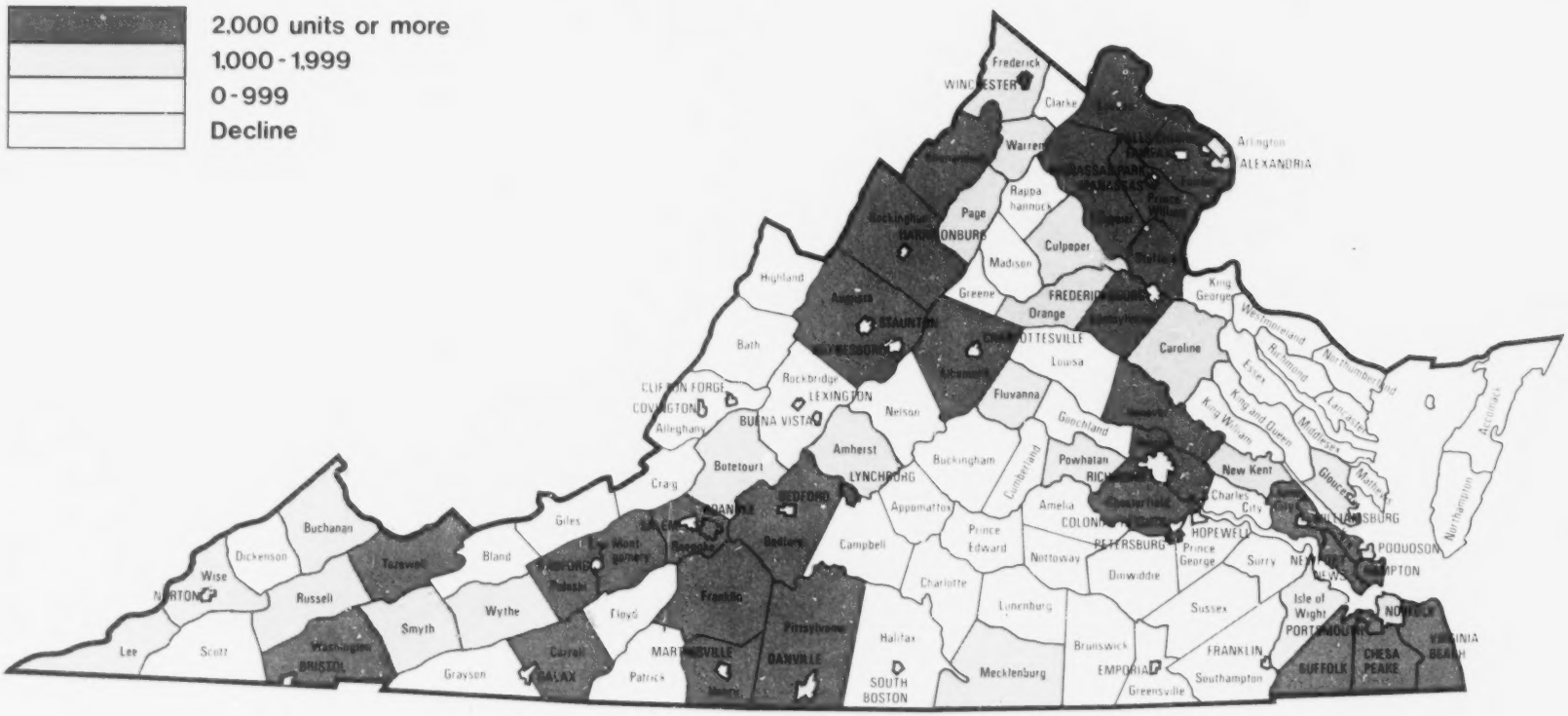


Figure 5.
Numerical Change in Multifamily Units by Locality, 1970-1980

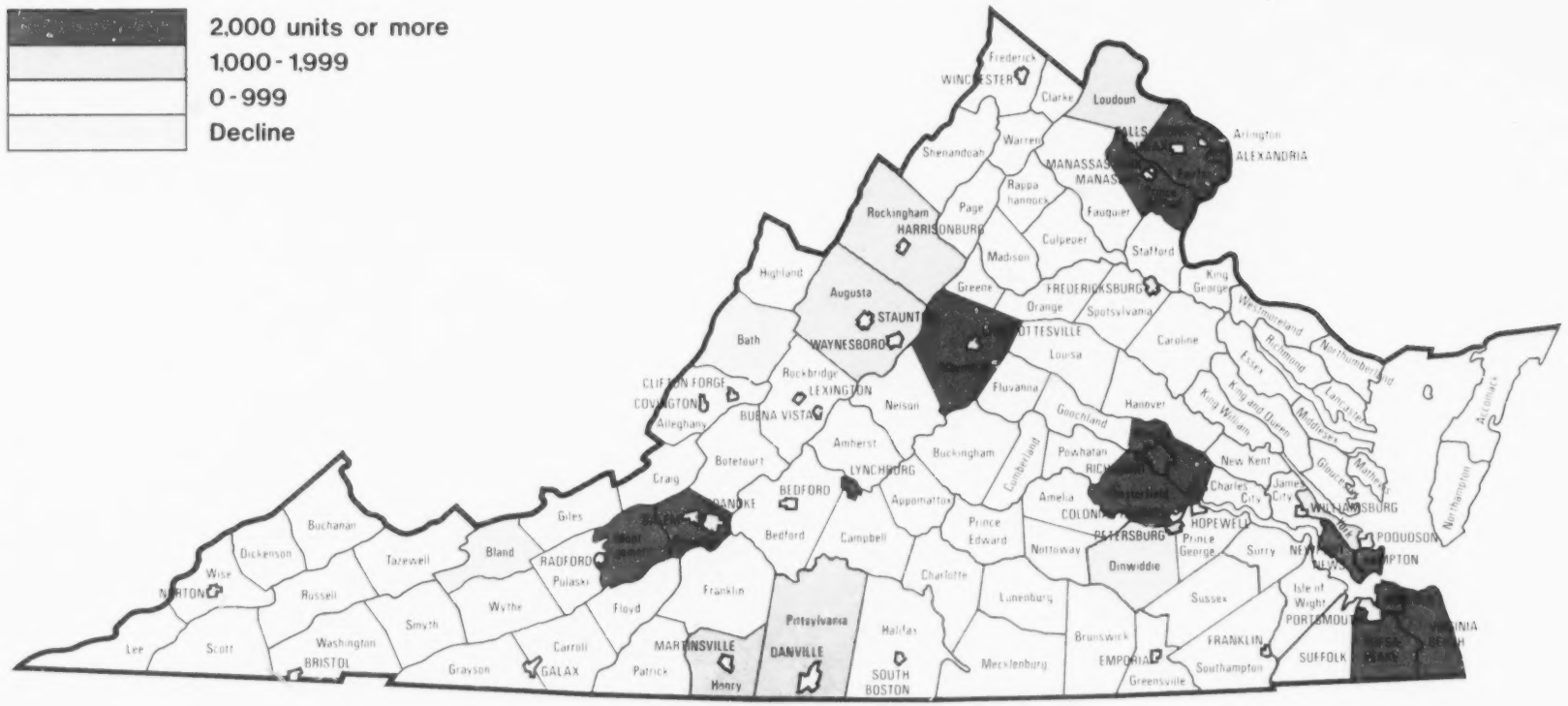


Figure 6.
Numerical Change in Mobile Homes by Locality, 1970-1980

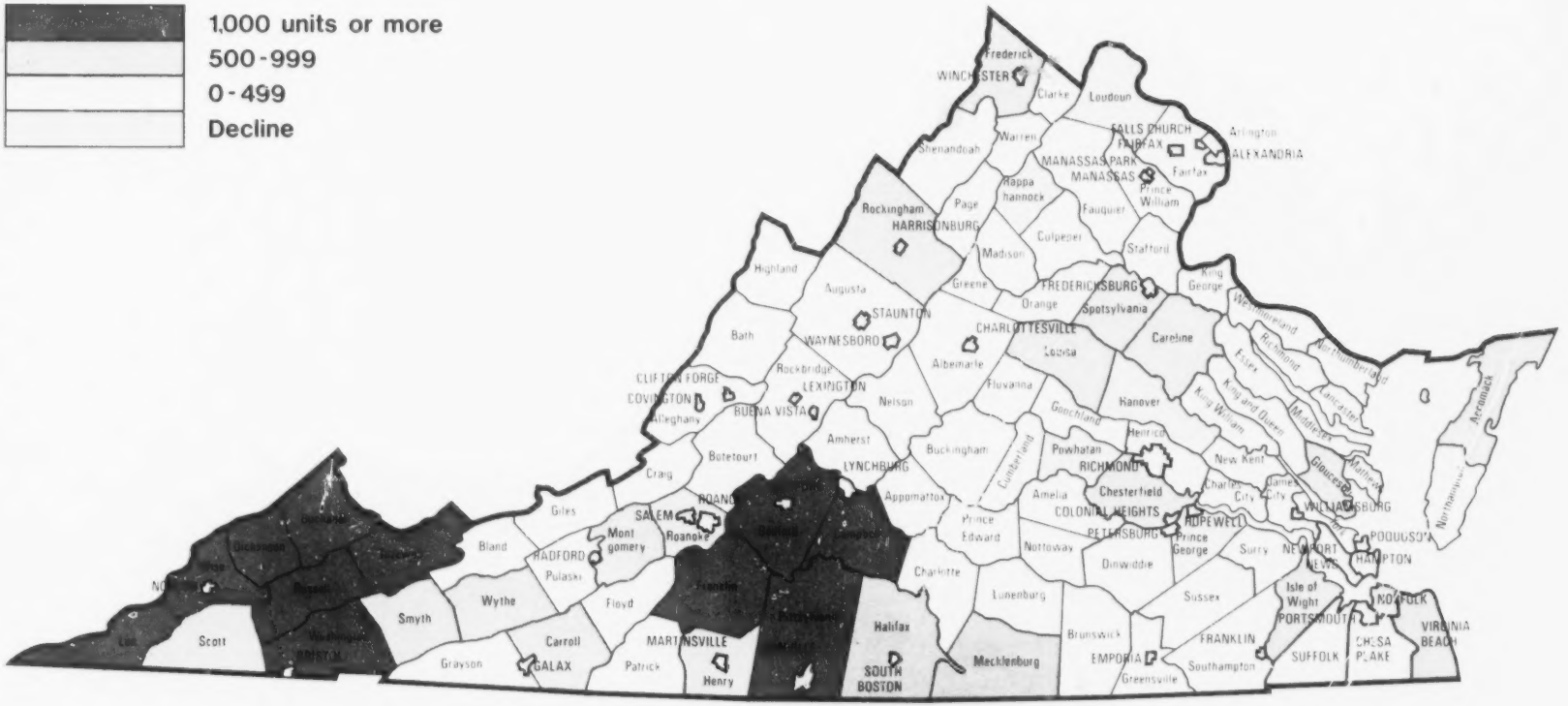


Table 5. Utilization Characteristics of Housing, Virginia, 1970 and 1980

Number of Rooms	1970		1980		Numeric Change 1970-1980	Percent Change 1970-1980
	Number	Percent	Number	Percent		
1	15,563	1.0	17,611	0.9	2,048	13.2
2	33,346	2.2	40,656	2.0	7,310	21.9
3	125,621	8.5	142,102	7.1	16,481	13.1
4	306,778	20.8	364,113	18.2	57,335	18.7
5	355,159	23.9	444,683	22.2	89,524	25.2
6	299,187	20.2	382,691	19.2	83,504	27.9
7	169,869	11.4	261,379	13.1	91,510	53.9
8 or more	178,628	12.0	345,458	17.3	166,830	93.4
Total	1,484,151	100.0	1,998,693	100.0	514,542	34.7
Median	5.2		5.5			

Table 6. Change in Size of Units and Average Household Size in Virginia Localities, 1970 and 1980

Locality	Median Rooms Per Unit		Difference 1980-1970	Persons Per Household		Difference 1980-1970
	1970	1980		1970	1980	
Counties:						
Accomack	5.1	5.3	0.2	2.95	2.67	-0.28
Albemarle	5.4	5.4	0.0	3.26	2.70	-0.56
Alleghany	5.2	5.4	0.2	3.38	2.93	-0.45
Amelia	5.4	5.5	0.1	3.63	3.04	-0.59
Amherst	5.2	5.4	0.2	3.36	2.95	-0.41
Appomattox	5.2	5.4	0.2	3.34	2.94	-0.40
Arlington	4.5	4.6	0.1	2.43	2.07	-0.36
Augusta	5.6	5.6	0.0	3.33	2.87	-0.46
Bath	5.0	5.4	0.4	3.00	2.78	-0.22
Bedford	5.2	5.6	0.4	3.37	2.89	-0.48
Bland	4.9	5.4	0.5	3.18	2.84	-0.34
Botetourt	5.4	5.8	0.4	3.26	2.89	-0.37
Brunswick	5.3	5.5	0.2	3.58	3.01	-0.57
Buchanan	4.7	5.0	0.3	3.78	3.20	-0.58
Buckingham	5.2	5.3	0.1	3.50	3.05	-0.45
Campbell	5.2	5.4	0.2	3.37	2.99	-0.38
Caroline	5.4	5.4	0.0	3.66	3.09	-0.57
Carroll	4.9	5.1	0.2	3.18	2.77	-0.41
Charles City	5.2	5.6	0.4	4.19	3.43	-0.76
Charlotte	5.3	5.4	0.1	3.52	3.00	-0.52
Chesterfield	5.8	6.3	0.5	3.42	3.02	-0.40
Clarke	5.5	5.7	0.2	3.20	2.74	-0.46
Craig	5.2	5.5	0.3	3.14	2.72	-0.42
Culpeper	5.4	5.7	0.3	3.36	2.93	-0.43
Cumberland	5.3	5.5	0.2	3.50	3.08	-0.42
Dickenson	4.7	5.1	0.4	3.55	3.09	-0.46
Dinwiddie	5.1	5.6	0.5	3.61	3.18	-0.43
Essex	5.4	5.6	0.2	3.43	2.87	-0.56
Fairfax	6.3	6.8	0.5	3.51	2.88	-0.63
Fauquier	5.6	6.1	0.5	3.41	3.05	-0.36
Floyd	5.4	5.4	0.0	3.14	2.75	-0.39
Fluvanna	5.3	5.5	0.2	3.41	2.99	-0.42
Franklin	5.2	5.3	0.1	3.37	2.89	-0.48
Frederick	5.3	5.6	0.3	3.35	2.96	-0.39
Giles	5.2	5.4	0.2	3.21	2.83	-0.38

Table 6. (continued)

Locality	Median Rooms Per Unit		Difference 1980-1970	Persons Per Household		Difference 1980-1970
	1970	1980		1970	1980	
Gloucester	5.3	5.6	0.3	3.16	2.80	-0.36
Goochland	5.5	5.9	0.4	3.64	3.02	-0.62
Grayson	5.0	5.1	0.1	3.11	2.74	-0.37
Greene	5.2	5.4	0.2	3.57	2.98	-0.59
Greensville	4.9	5.2	0.3	3.68	3.16	-0.52
Halifax	5.1	5.3	0.2	3.52	2.98	-0.54
Hanover	5.8	6.3	0.5	3.45	3.02	-0.43
Henrico	5.6	5.7	0.1	3.18	2.66	-0.52
Henry	5.0	5.2	0.2	3.43	2.94	-0.49
Highland	5.7	5.8	0.1	3.02	2.64	-0.38
Isle of Wight	5.3	5.6	0.3	3.59	3.04	-0.55
James City	5.0	5.6	0.6	3.38	2.82	-0.56
King and Queen	5.7	5.7	0.0	3.44	2.90	-0.54
King George	5.3	5.6	0.3	3.30	2.98	-0.32
King William	5.5	5.9	0.4	3.47	3.02	-0.45
Lancaster	5.3	5.7	0.4	2.99	2.53	-0.46
Lee	4.9	5.2	0.3	3.10	2.90	-0.20
Loudoun	5.9	6.4	0.5	3.53	3.05	-0.48
Louisa	5.3	5.4	0.1	3.44	2.97	-0.47
Lunenburg	5.3	5.5	0.2	3.30	2.84	-0.46
Madison	5.5	5.7	0.2	3.35	2.98	-0.37
Mathews	5.6	5.8	0.2	2.81	2.53	-0.28
Mecklenburg	5.3	5.4	0.1	3.36	2.84	-0.52
Middlesex	5.3	5.6	0.3	2.99	2.59	-0.40
Montgomery	4.8	5.0	0.2	3.04	2.63	-0.41
Nelson	5.4	5.4	0.0	3.33	2.84	-0.49
New Kent	5.1	5.6	0.5	3.51	2.95	-0.56
Northampton	5.3	5.4	0.1	3.06	2.70	-0.36
Northumberland	5.5	5.7	0.2	3.02	2.57	-0.45
Nottoway	5.4	5.6	0.2	3.22	2.81	-0.41
Orange	5.5	5.6	0.1	3.20	2.86	-0.34
Page	5.4	5.5	0.1	3.13	2.78	-0.35
Patrick	5.0	5.1	0.1	3.22	2.82	-0.40
Pittsylvania	4.9	5.1	0.2	3.52	2.97	-0.55
Powhatan	5.4	6.0	0.6	3.61	3.17	-0.44

Table 6. (continued)

Locality	Median Rooms Per Unit		Difference 1980-1970	Persons Per Household		Difference 1980-1970
	1970	1980		1970	1980	
Prince Edward	5.3	5.3	0.0	3.08	2.80	-0.28
Prince George	5.2	5.5	0.3	3.58	3.26	-0.32
Prince William	6.4	6.8	0.4	3.88	3.26	-0.62
Pulaski	4.9	5.2	0.3	3.23	2.82	-0.41
Rappahannock	5.2	5.6	0.4	3.27	2.83	-0.44
Richmond	5.2	5.6	0.4	3.27	2.83	-0.44
Roanoke	5.7	6.0	0.3	3.31	2.80	-0.51
Rockbridge	5.4	5.5	0.1	3.27	2.82	-0.45
Rockingham	5.5	5.6	0.1	3.30	2.89	-0.41
Russell	5.0	5.2	0.2	3.48	2.98	-0.50
Scott	4.8	5.1	0.3	3.28	2.86	-0.42
Shenandoah	5.6	5.7	0.1	3.02	2.72	-0.30
Smyth	5.1	5.3	0.2	3.28	2.84	-0.44
Southampton	5.3	5.6	0.3	3.64	3.06	-0.58
Spotsylvania	5.2	5.8	0.6	3.45	3.16	-0.29
Stafford	5.1	6.1	1.0	3.44	3.19	-0.25
Surry	5.5	5.6	0.1	3.71	3.01	-0.70
Sussex	5.3	5.5	0.2	3.77	3.04	-0.73
Tazewell	5.0	5.3	0.3	3.30	2.93	-0.37
Warren	5.3	5.5	0.2	3.07	2.71	-0.36
Washington	5.1	5.3	0.2	3.22	2.86	-0.36
Westmoreland	5.0	5.5	0.5	3.27	2.78	-0.49
Wise	4.9	5.1	0.2	3.34	2.93	-0.41
Wythe	5.3	5.3	0.0	3.25	2.81	-0.44
York	6.1	6.0	-0.1	3.63	3.15	-0.48
Cities:						
Alexandria	4.4	4.5	0.1	2.57	2.07	-0.50
Bedford	5.3	5.4	0.1	2.90	2.42	-0.48
Bristol	5.1	5.2	0.1	2.90	2.54	-0.36
Buena Vista	5.2	5.3	0.1	3.19	2.88	-0.31
Charlottesville	4.9	5.1	0.2	2.78	2.50	-0.28
Chesapeake	5.4	5.8	0.4	3.52	3.11	-0.41
Clifton Forge	5.6	5.8	0.2	2.89	2.54	-0.35
Colonial Heights	5.5	6.0	0.5	3.18	2.79	-0.39
Covington	5.2	5.3	0.1	3.01	2.57	-0.44
Danville	4.9	5.1	0.2	2.92	2.55	-0.37

Table 6. (continued)

Locality	Median Rooms Per Unit		Difference 1980-1970	Persons Per Household		Difference 1980-1970
	1970	1980		1970	1980	
Emporia	5.1	5.3	0.2	3.04	2.67	-0.37
Fairfax	5.9	6.3	0.4	3.53	2.76	-0.77
Falls Church	5.3	5.5	0.2	2.90	2.23	-0.67
Franklin	5.3	5.4	0.1	3.24	2.80	-0.44
Fredericksburg	5.1	5.1	0.0	2.72	2.29	-0.43
Galax	4.9	5.1	0.2	2.91	2.45	-0.46
Hampton	5.3	5.5	0.2	3.34	2.83	-0.51
Harrisonburg	5.3	5.4	0.1	2.79	2.46	-0.33
Hopewell	5.3	5.4	0.1	3.22	2.72	-0.50
Lexington	5.2	5.5	0.3	2.79	2.38	-0.41
Lynchburg	5.1	5.3	0.2	2.94	2.60	-0.34
Manassas	5.7	6.2	0.5	3.28	2.98	-0.30
Manassas Park	5.2	5.5	0.3	4.52	3.51	-1.01
Martinsville	5.1	5.4	0.3	3.23	2.66	-0.57
Newport News	5.2	5.4	0.2	3.24	2.73	-0.51
Norfolk	4.9	5.0	0.1	3.04	2.65	-0.39
Norton	5.1	5.1	0.0	3.02	2.83	-0.19
Petersburg	4.9	5.1	0.2	3.16	2.72	-0.44
Poquoson	5.6	6.4	0.8	3.37	3.14	-0.23
Portsmouth	5.0	5.3	0.3	3.17	2.79	-0.38
Radford	5.3	5.4	0.1	2.96	2.54	-0.42
Richmond	4.9	5.0	0.1	2.89	2.43	-0.46
Roanoke	5.2	5.3	0.1	2.85	2.46	-0.39
Salem	5.2	5.4	0.2	2.97	2.54	-0.43
South Boston	5.0	5.3	0.3	3.03	2.65	-0.38
Staunton	5.5	5.7	0.2	2.91	2.53	-0.38
Suffolk	6.0	5.7	-0.3	3.40	3.00	-0.40
Virginia Beach	5.9	6.2	0.3	3.54	2.97	-0.57
Waynesboro	5.5	5.5	0.0	3.11	2.61	-0.50
Williamsburg	4.5	4.7	0.2	2.47	2.12	-0.35
Winchester	5.4	5.4	0.0	2.80	2.42	-0.38

Figure 7.
Median Age of Housing Units in Virginia and the U.S., 1940-1980

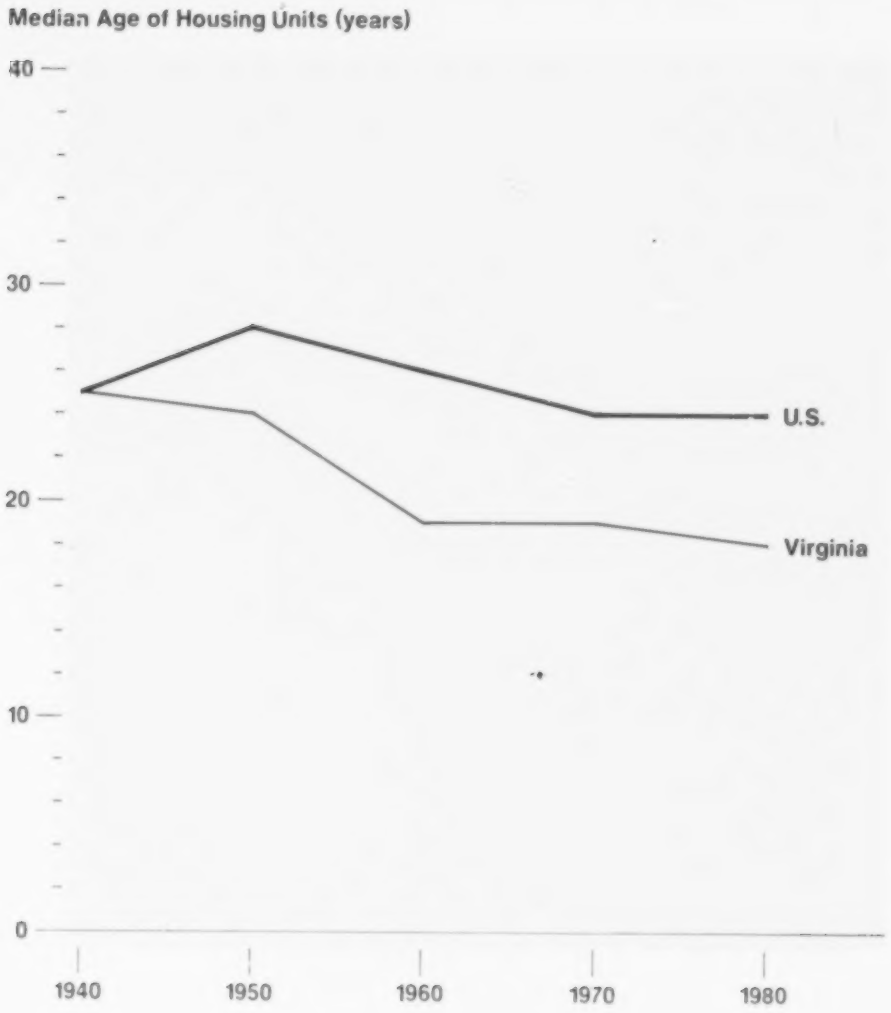


Table 7. Housing by Year Built, Virginia, 1980

Year-Built	Year-Round Units	
	Number	Percent
1970-March 1980	617,783	30.8
1979-March 1980	75,582	3.8
1975-1978	225,623	11.2
1970-1974	316,578	15.8
1960-1969	457,798	22.9
1950-1959	339,662	17.0
1940-1949	231,235	11.6
1939 or Earlier	353,597	17.7
Total	2,000,075	100.0

Table 8. Distribution of Units by Year Built in Virginia Localities, 1980

Locality	1979-March 1980		1975-1978		1970-1974		1960-1969	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Counties:								
1. Accomack	259	2.0	948	7.2	1,543	11.7	1,729	13.1
2. Albemarle	857	4.2	2,863	14.1	4,739	23.4	5,330	26.3
3. Alleghany	145	2.7	593	11.2	779	14.7	1,135	21.4
4. Amelia	119	4.0	329	11.1	472	15.9	595	20.0
5. Amherst	247	2.6	1,131	11.8	1,626	17.0	2,122	22.2
6. Appomattox	152	3.4	609	13.7	874	19.7	910	20.5
7. Arlington	1,075	1.4	2,229	3.0	3,229	4.3	16,278	21.6
8. Augusta	772	4.0	2,340	12.1	3,384	17.4	3,536	18.2
9. Bath	66	2.8	227	9.6	224	9.5	395	16.7
10. Bedford	790	6.0	2,374	18.1	2,202	16.8	2,414	18.4
11. Bland	69	3.2	235	10.8	416	19.1	337	15.5
12. Botetourt	305	3.6	1,146	13.5	1,530	18.1	1,485	17.5
13. Brunswick	156	2.7	499	8.6	994	17.2	948	16.4
14. Buchanan	466	3.6	2,070	16.2	2,406	18.8	2,202	17.2
15. Buckingham	111	2.5	485	10.8	683	15.1	870	19.3
16. Campbell	615	3.8	2,307	14.2	3,441	21.2	3,825	23.6
17. Caroline	255	4.0	1,210	18.9	1,296	20.2	1,123	17.5
18. Carroll	383	3.4	1,105	9.9	1,747	15.6	2,235	20.0
19. Charles City	73	3.4	244	11.4	376	17.6	508	23.8
20. Charlotte	97	2.2	315	7.0	558	12.4	784	17.4
21. Chesterfield	4,780	9.8	11,344	23.2	11,601	23.7	11,675	23.9
22. Clarke	94	2.4	559	14.5	438	11.4	619	16.0
23. Craig	50	3.0	119	7.0	243	14.4	347	20.6
24. Culpeper	261	3.2	857	10.4	1,508	18.3	1,614	19.6
25. Cumberland	41	1.4	384	12.8	476	15.9	621	20.7
26. Dickenson	270	3.9	1,121	16.2	1,293	18.7	1,030	14.9
27. Dinwiddie	136	2.0	860	12.7	1,293	19.1	1,486	22.0
28. Essex	78	2.2	337	9.5	784	22.2	671	19.0
29. Fairfax	14,030	6.5	33,544	15.6	43,868	20.3	67,490	31.3
30. Fauquier	744	5.9	1,705	13.6	1,664	13.3	1,950	15.6
31. Floyd	191	4.0	452	9.5	551	11.5	786	16.4
32. Fluvanna	175	4.6	618	16.3	672	17.7	733	19.3
33. Franklin	631	4.9	1,918	14.9	2,348	18.2	2,736	21.2
34. Frederick	598	4.9	1,911	15.6	2,330	19.0	2,661	21.7
35. Giles	133	2.0	441	6.6	757	11.4	1,129	17.0

1950-1959		1940-1949		1939 or Earlier		Median Age of Housing	
Number	Percent	Number	Percent	Number	Percent		
1,820	13.8	1,640	12.5	5,210	39.6	32	1.
1,919	9.5	851	4.2	3,690	18.2	13	2.
814	15.4	569	10.7	1,267	23.9	20	3.
341	11.4	249	8.4	871	29.3	20	4.
1,393	14.6	883	9.2	2,170	22.7	18	5.
587	13.2	348	7.8	956	21.6	16	6.
19,066	25.4	22,109	29.4	11,189	14.9	28	7.
2,703	13.9	1,634	8.4	5,022	25.9	19	8.
265	11.2	197	8.3	993	42.0	30	9.
1,487	11.3	1,067	8.1	2,795	21.3	15	10.
270	12.4	248	11.4	604	27.7	21	11.
1,082	12.8	754	8.9	2,165	25.6	18	12.
965	16.7	761	13.2	1,443	25.0	23	13.
1,953	15.3	1,948	15.3	1,719	13.5	16	14.
612	13.6	502	11.1	1,247	27.6	22	15.
2,196	13.5	1,273	7.8	2,577	15.9	15	16.
752	11.8	589	9.2	1,174	18.4	14	17.
1,652	14.8	1,522	13.6	2,532	22.7	21	18.
370	17.3	162	7.6	400	18.8	17	19.
717	15.9	544	12.0	1,498	33.1	27	20.
4,857	9.9	2,234	4.6	2,387	4.9	9	21.
540	14.0	281	7.3	1,328	34.4	24	22.
185	11.0	113	6.7	630	37.3	25	23.
1,032	12.5	739	9.0	2,236	27.1	19	24.
365	12.2	227	7.6	888	29.6	20	25.
827	12.0	909	13.2	1,449	21.0	17	26.
1,038	15.4	716	10.6	1,230	18.2	17	27.
473	13.4	355	10.0	833	23.6	18	28.
40,144	18.6	11,228	5.2	5,367	2.5	12	29.
1,640	13.1	955	7.6	3,859	30.8	21	30.
528	11.0	602	12.6	1,669	34.9	28	31.
430	11.3	320	8.4	851	22.4	16	32.
1,808	14.0	1,072	8.3	2,393	18.5	16	33.
1,426	11.6	974	7.9	2,382	19.4	15	34.
1,071	16.1	1,416	21.3	1,693	25.5	28	35.

Table 8. (continued)

Locality	1979-March 1980		1975-1978		1970-1974		1960-1969	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
36. Gloucester	572	7.3	1,161	14.7	1,386	17.6	1,618	20.5
37. Goochland	113	2.8	496	12.4	627	15.7	865	21.7
38. Grayson	171	2.6	555	8.4	917	13.9	1,334	20.2
39. Greene	199	6.9	545	19.0	552	19.2	580	20.2
40. Greensville	83	2.2	378	10.0	726	19.3	803	21.3
41. Halifax	208	1.8	1,037	9.2	1,733	15.4	2,176	19.3
42. Hanover	817	4.7	2,438	14.1	3,508	20.4	4,139	24.0
43. Henrico	3,674	5.2	7,170	10.2	10,472	14.9	18,203	25.8
44. Henry	597	2.8	2,096	10.0	3,468	16.6	5,816	27.8
45. Highland	81	5.6	147	10.2	115	8.0	119	8.3
46. Isle of Wight	310	4.0	1,110	14.5	1,490	19.5	1,297	16.9
47. James City	607	7.1	1,696	19.9	1,998	23.4	2,191	25.7
48. King and Queen	72	3.2	214	9.4	398	17.4	309	13.5
49. King George	126	3.2	422	10.7	868	22.0	827	21.0
50. King William	231	6.8	465	13.7	446	13.2	518	15.3
51. Lancaster	140	3.1	494	10.8	712	15.6	735	16.1
52. Lee	397	4.1	1,202	12.4	1,438	14.9	918	9.5
53. Loudoun	1,011	5.1	2,706	13.8	5,006	25.5	4,416	22.4
54. Louisa	220	3.3	880	13.1	1,255	18.7	1,236	18.5
55. Lunenburg	64	1.3	372	7.8	633	13.2	719	15.0
56. Madison	130	3.4	377	9.9	655	17.2	639	16.7
57. Mathews	101	2.8	289	8.0	382	10.5	605	16.7
58. Mecklenburg	224	1.8	1,278	10.5	1,931	15.9	2,062	17.0
59. Middlesex	82	2.3	292	8.3	534	15.2	568	16.2
60. Montgomery	1,434	6.4	3,189	14.3	4,992	22.4	5,599	25.1
61. Nelson	149	3.1	586	12.1	640	13.3	783	16.2
62. New Kent	239	7.5	598	18.8	686	21.6	784	24.7
63. Northampton	67	1.1	464	7.7	523	8.6	764	12.6
64. Northumberland	103	2.3	437	9.6	573	12.6	836	18.4
65. Nottoway	66	1.2	493	8.8	558	9.9	880	15.7
66. Orange	378	5.2	880	12.0	1,389	19.0	1,222	16.7
67. Page	233	2.9	735	9.1	1,211	15.0	1,128	14.0
68. Patrick	263	3.9	635	9.3	982	14.4	1,495	21.9
69. Pittsylvania	698	2.9	2,788	11.7	4,199	17.6	4,607	19.3
70. Powhatan	246	6.4	841	22.0	910	23.8	713	18.6
71. Prince Edward	129	2.3	597	10.8	893	16.1	837	15.1
72. Prince George	369	5.3	950	13.7	1,361	19.6	1,666	24.0
73. Prince William	3,564	7.7	7,778	16.8	12,679	27.3	14,266	30.7
74. Pulaski	426	3.2	1,187	9.0	2,411	18.3	2,210	16.8
75. Rappahannock	88	3.4	221	8.5	329	12.6	357	13.7

1950-1959		1940-1949		1939 or Earlier		Median Age of Housing	
Number	Percent	Number	Percent	Number	Percent		
1,009	12.8	583	7.4	1,549	19.7	15	36.
591	14.8	370	9.3	929	23.3	19	37.
936	14.2	915	13.9	1,764	26.8	23	38.
274	9.6	175	6.1	544	19.0	12	39.
669	17.8	519	13.8	589	15.6	19	40.
1,796	16.0	1,550	13.8	2,751	24.4	23	41.
2,400	13.9	1,303	7.6	2,627	15.2	15	42.
17,907	25.4	8,139	11.6	4,845	6.9	18	43.
4,017	19.2	2,384	11.4	2,557	12.2	17	44.
100	6.9	127	8.8	750	52.1	40	45.
1,101	14.4	656	8.6	1,689	22.1	17	46.
1,091	12.8	318	3.7	623	7.3	10	47.
382	16.7	158	6.9	756	33.0	24	48.
617	15.6	458	11.6	623	15.8	17	49.
476	14.1	317	9.4	931	27.5	21	50.
756	16.5	545	11.9	1,188	26.0	23	51.
1,156	12.0	1,565	16.2	2,976	30.8	28	52.
1,688	8.6	744	3.8	4,095	20.8	12	53.
792	11.8	615	9.2	1,698	25.4	18	54.
673	14.0	745	15.6	1,585	33.1	29	55.
482	12.6	321	8.4	1,214	31.8	22	56.
521	14.4	316	8.7	1,407	38.9	28	57.
1,886	15.5	1,590	13.1	3,158	26.0	23	58.
535	15.2	435	12.4	1,063	30.3	25	59.
2,440	10.9	1,812	8.1	2,869	12.8	13	60.
573	11.9	558	11.6	1,535	31.8	24	61.
305	9.6	224	7.0	340	10.7	11	62.
842	13.9	939	15.5	2,443	40.4	34	63.
671	14.7	668	14.7	1,265	27.8	25	64.
838	14.9	819	14.6	1,935	34.8	30	65.
925	12.6	579	7.9	1,954	26.7	18	66.
1,080	13.4	744	9.2	2,931	36.4	27	67.
1,120	16.4	850	12.5	1,469	21.6	20	68.
3,798	15.9	2,931	12.3	4,802	20.2	19	69.
255	6.7	153	4.0	705	18.4	10	70.
824	14.9	683	12.3	1,568	28.3	24	71.
1,460	21.0	429	6.2	701	10.1	15	72.
4,464	9.6	1,600	3.4	2,081	4.5	10	73.
1,714	13.0	2,191	16.6	3,049	23.1	22	74.
263	10.1	200	7.7	1,148	44.0	32	75.

Table 8. (continued)

Locality	1979-March 1980		1975-1978		1970-1974		1960-1969	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
76. Richmond	96	3.4	256	9.2	365	13.1	386	13.8
77. Roanoke	1,308	4.9	3,993	14.9	5,979	22.4	7,686	28.7
78. Rockbridge	153	2.2	480	6.8	1,038	14.8	1,299	18.5
79. Rockingham	589	2.9	2,173	10.6	3,229	15.8	3,635	17.8
80. Russell	396	3.4	1,749	15.2	2,161	18.8	1,954	17.0
81. Scott	206	2.1	650	6.7	1,226	12.6	1,776	18.2
82. Shenandoah	403	3.4	1,296	10.9	1,855	15.6	1,719	14.5
83. Smyth	278	2.3	992	8.1	1,812	14.9	2,333	19.1
84. Southampton	156	2.5	606	9.7	829	13.3	1,041	16.6
85. Spotsylvania	991	8.4	3,336	28.2	2,694	22.8	1,702	14.4
86. Stafford	960	7.3	3,210	24.4	2,643	20.1	2,370	18.0
87. Surry	68	2.8	127	5.2	355	14.6	460	19.0
88. Sussex	154	3.9	312	7.9	531	13.4	623	15.8
89. Tazewell	590	3.2	2,601	14.3	3,290	18.0	2,544	14.0
90. Warren	397	4.5	1,172	13.2	1,431	16.1	1,532	17.3
91. Washington	646	3.6	2,493	14.1	2,938	16.6	3,246	18.3
92. Westmoreland	132	2.2	665	11.0	851	14.1	1,236	20.5
93. Wise	477	3.0	2,561	16.4	2,512	16.1	2,011	12.8
94. Wythe	409	4.2	1,272	13.1	1,452	14.9	1,301	13.4
95. York	533	4.7	1,719	15.1	2,191	19.2	3,653	32.0
Cities:								
96. Alexandria	744	1.4	5,103	9.8	6,283	12.1	14,592	28.0
97. Bedford	249	9.5	248	9.5	206	7.9	400	15.3
98. Bristol	291	3.8	470	6.1	751	9.7	1,448	18.7
99. Buena Vista	29	1.2	119	4.9	275	11.4	356	14.8
100. Charlottesville	243	1.5	933	5.8	1,476	9.2	3,944	24.7
101. Chesapeake	1,449	3.8	5,378	14.2	6,941	18.2	10,605	27.9
102. Clifton Forge	81	3.9	61	3.0	33	1.6	197	9.5
103. Colonial Heights	86	1.4	387	6.4	829	13.6	2,002	32.9
104. Covington	30	0.8	61	1.6	89	2.4	416	11.2
105. Danville	298	1.6	987	5.4	1,592	8.6	3,659	19.9
106. Emporia	99	5.1	123	6.3	65	3.3	254	13.0
107. Fairfax	54	0.8	355	5.0	474	6.7	2,887	41.0
108. Falls Church	143	3.2	537	11.9	333	7.4	1,000	22.2
109. Franklin	48	1.8	216	8.0	413	15.4	407	15.1
110. Fredericksburg	110	1.7	346	5.5	963	15.2	1,303	20.6

1950-1959		1940-1949		1939 or Earlier		Median Age of Housing	
Number	Percent	Number	Percent	Number	Percent		
465	16.7	377	13.5	844	30.3	26	76.
3,062	13.5	1,587	5.9	2,595	9.7	13	77.
942	13.4	587	8.4	2,505	35.8	26	78.
2,898	14.2	1,840	9.0	6,102	29.8	22	79.
1,326	11.5	1,140	9.9	2,792	24.2	17	80.
1,470	15.1	1,649	16.9	2,764	28.4	27	81.
1,212	10.2	801	6.8	4,579	38.6	25	82.
1,867	15.3	1,791	14.7	3,116	25.6	24	83.
929	14.9	820	13.1	1,870	29.9	25	84.
1,209	10.2	706	6.0	1,169	9.9	8	85.
1,506	11.4	1,031	7.8	1,426	10.8	10	86.
330	13.6	213	8.8	870	35.9	26	87.
625	15.8	523	13.2	1,184	30.0	26	88.
2,236	12.3	2,545	14.0	4,424	24.3	20	89.
1,111	12.5	1,243	14.0	1,988	22.4	19	90.
2,179	12.3	1,965	11.1	4,224	23.9	18	91.
856	14.2	776	12.9	1,518	25.2	22	92.
1,894	12.1	2,126	13.6	4,064	26.0	21	93.
1,127	11.6	1,048	10.8	3,111	32.0	24	94.
2,022	17.7	656	5.8	627	5.5	13	95.
9,686	18.6	9,060	17.4	6,554	12.6	20	96.
499	19.1	335	12.8	671	25.7	24	97.
1,445	18.7	1,330	17.2	2,006	25.9	24	98.
482	20.0	374	15.5	771	32.0	29	99.
3,497	21.9	1,855	11.6	4,032	25.2	24	100.
7,088	18.6	3,437	9.0	3,137	8.2	15	101.
170	8.2	157	7.6	1,365	66.1	40+	102.
1,289	21.2	694	11.4	791	13.0	19	103.
585	15.7	752	20.2	1,788	48.0	39	104.
3,732	20.3	2,474	13.4	5,661	30.8	27	105.
422	21.6	358	18.3	630	32.3	30	106.
2,711	38.5	365	5.2	198	2.8	19	107.
962	21.4	1,147	25.5	381	8.5	22	108.
606	22.5	395	14.7	603	22.4	24	109.
872	13.8	699	11.1	2,029	32.1	25	110.

Table 8. (continued)

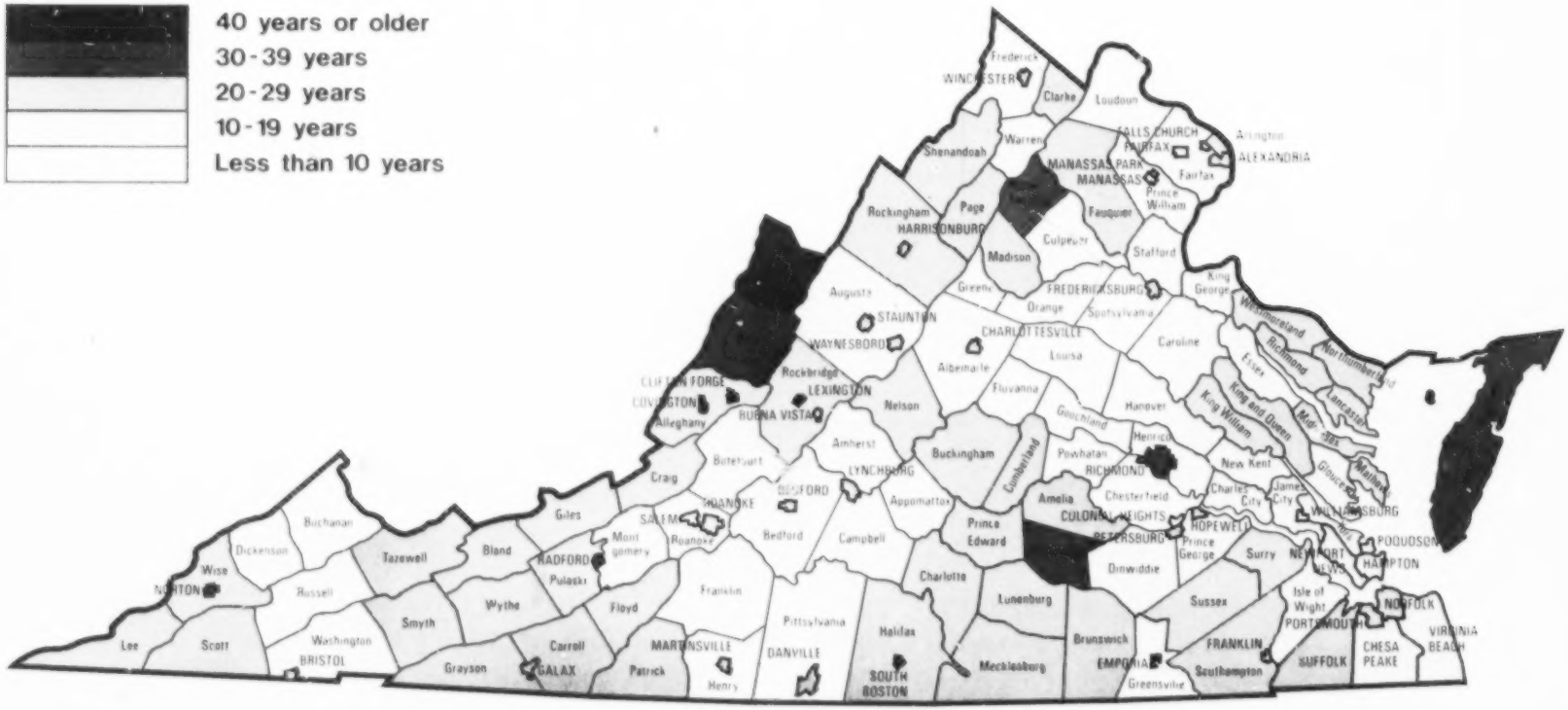
Locality	1979-March 1980		1975-1978		1970-1974		1960-1969	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
111. Galax	64	2.3	207	7.4	340	12.1	531	19.0
112. Hampton	836	1.9	1,987	4.6	6,298	14.5	14,917	34.2
113. Harrisonbury	308	5.0	624	10.1	900	14.6	1,014	16.4
114. Hopewell	297	3.2	848	9.1	1,129	12.2	1,931	20.8
115. Lexington	35	1.5	132	5.5	99	4.1	361	15.1
116. Lynchbury	324	1.3	1,549	6.1	3,158	12.4	4,897	19.3
117. Manassas	743	13.5	1,095	19.9	544	9.9	1,886	34.2
118. Manassas Park	7	0.4	142	7.4	159	8.2	515	26.7
119. Martinsville	123	1.7	209	3.0	657	9.3	1,512	21.4
120. Newport News	1,017	1.8	4,362	7.9	10,559	19.2	16,678	30.3
121. Norfolk	1,159	1.2	5,051	5.3	8,137	8.6	16,569	17.5
122. Norton	34	1.8	219	11.9	234	12.7	200	10.9
123. Petersburg	126	0.8	1,005	6.2	2,089	12.9	3,853	23.9
124. Poquoson	244	8.3	600	20.4	470	16.0	599	20.4
125. Portsmouth	704	1.8	2,512	6.5	3,248	8.4	7,195	18.6
126. Radford	118	2.8	305	7.3	499	12.0	724	17.4
127. Richmond	924	1.0	4,165	4.6	7,446	8.1	17,934	19.6
128. Roanoke	462	1.1	1,469	3.4	4,632	10.8	7,796	18.3
129. Salem	222	2.5	542	6.0	1,654	18.4	2,375	26.4
130. South Boston	21	0.8	160	5.7	236	8.4	388	13.8
131. Staunton	103	1.2	380	4.4	543	6.3	1,769	20.5
132. Suffolk	341	2.0	1,251	7.5	2,377	14.2	3,093	18.5
133. Virginia Beach	6,152	6.7	19,300	21.1	21,361	23.4	26,293	28.8
134. Waynesboro	177	2.8	214	3.4	510	8.2	1,303	21.0
135. Williamsburg	24	0.8	138	4.5	580	19.1	855	28.1
136. Winchester	213	2.5	542	6.5	683	8.2	1,484	17.7
Total Counties	56,850	4.6	161,291	13.1	217,313	17.7	277,656	22.6
Total Cities	18,732	2.4	64,332	8.4	99,265	12.9	180,142	23.4
Total Virginia	75,582	3.8	225,623	11.3	316,578	15.8	457,798	22.9

1950-1959		1940-1949		1939 or Earlier		Median Age of Housing	
Number	Percent	Number	Percent	Number	Percent		
452	16.2	556	19.9	649	23.2	26	111.
9,431	21.6	5,100	11.7	4,993	11.5	18	112.
987	16.0	644	10.4	1,693	27.4	22	113.
2,164	23.3	1,278	13.8	1,644	17.7	22	114.
310	13.0	268	11.2	1,184	49.6	40	115.
4,611	18.2	3,219	12.7	7,635	30.1	26	116.
593	10.8	195	3.5	455	8.3	12	117.
1,068	55.3	36	1.9	4	0.2	21	118.
1,544	21.8	1,331	18.8	1,698	24.0	27	119.
9,906	18.0	6,587	12.0	5,877	10.7	17	120.
23,206	24.5	20,773	21.9	19,927	21.0	27	121.
218	11.8	272	14.8	662	36.0	31	122.
3,229	20.0	1,891	11.7	3,946	24.4	23	123.
297	10.1	270	9.2	463	15.7	13	124.
8,786	22.8	8,882	23.0	7,258	18.8	26	125.
440	10.6	863	20.7	1,213	29.1	30	126.
15,801	17.3	14,425	15.8	30,785	33.6	30	127.
9,143	21.4	6,564	15.4	12,620	29.6	28	128.
1,693	18.8	962	10.7	1,565	17.4	19	129.
534	19.0	499	17.7	978	34.7	31	130.
1,784	20.7	1,146	13.3	2,892	33.6	28	131.
3,012	18.0	2,216	13.3	4,419	26.4	24	132.
12,499	13.7	3,575	3.9	2,260	2.5	10	133.
1,480	23.9	989	15.9	1,529	24.6	26	134.
456	15.0	399	13.1	589	19.4	19	135.
1,411	16.8	1,220	14.6	2,829	33.8	29	136.
190,561	15.5	123,643	10.0	203,213	16.5	16	
149,101	19.4	107,592	14.0	150,384	19.5	22	
339,662	17.0	231,235	11.6	353,597	17.7	18	

Table 9. Housing Survival, Virginia, 1940-1980

	1940	1950	1960	1970	1980
Total Year-Round Units	659,787	901,483	1,168,913	1,484,952	2,000,075
Built 1939/earlier:					
Number	659,787	618,525	559,576	454,366	353,597
% of total	100.0	68.6	47.9	30.6	17.7
Units removed	NA	-41,262	-58,949	-105,210	-100,769
Built 1949/earlier:					
Number	NA	901,483	798,048	682,098	584,832
% of total	NA	100.0	68.3	45.9	29.2
Units removed	NA	NA	-103,435	-115,950	-97,266
Built 1959/earlier:					
Number	NA	NA	1,168,913	1,016,858	924,494
% of total	NA	NA	100.0	68.5	46.2
Units removed	NA	NA	NA	-152,055	-92,364
Built 1969/earlier:					
Number	NA	NA	NA	1,484,952	1,382,292
% of total	NA	NA	NA	100.0	69.1
Units removed	NA	NA	NA	NA	-101,859

Figure 8
Median Age of Housing by Locality, 1970-1980



IV. OCCUPANCY CHARACTERISTICS AND HOUSING CONDITION

This section provides a discussion and description of changes in the occupancy characteristics and condition of the state's housing inventory. These characteristics include tenure of occupants, or the mix of owners and renters, the year the householder moved into the unit, the incidence of overcrowding, availability of plumbing and heating equipment, and fuels used for home heating and cooking needs. In general, the trend between 1970 and 1980 has been toward improved living conditions for residents of Virginia's housing units.

Type of Housing Tenure

Over the past forty years, there has been a considerable shift in the tenure characteristics of Virginia's housing inventory. As Table 10 and Figure 9 show, the number and percentage of owner-occupied dwelling units has been steadily increasing since the 1940s. Correspondingly, housing units occupied by renters, although increasing in number, have steadily declined as a percentage of all occupied units. In 1940, for example, the number of housing units occupied by renters was actually higher than owner-occupied units by approximately 14,000 units, accounting for slightly over half of all occupied units. By 1980, renter-occupied units had declined to 34.4 percent of the total, with owner-occupied dwellings outnumbering renter-occupied by a margin of three to two.

This trend toward owner-occupied housing clearly reflects the achievement of the American dream of homeownership. This desire to own your own home first appeared in the 1940s, when large subdivisions were developed on the outskirts of cities to provide housing for returning veterans and their families. These suburban communities were built and marketed to appeal primarily to persons of middle socioeconomic status. With this in mind, the price of the housing was usually kept at a level which would allow families with only moderate incomes to purchase homes with little or no downpayment. The manner in which the houses were marketed stressed the selling points of increased living space and community living, both of which appealed to persons who were currently living in rental housing in the cities. The need for additional living space and concerns for quality of life were exacerbated by the baby boom which occurred after World War II. Homeownership became a goal and status symbol for many Americans. The purchase of a home demonstrated to others that the householder had achieved a certain station in life.

When homeownership became the norm, the dream became reality. However, when housing values and interest rates increased dramatically during the 1970s, making it more difficult or nearly impossible for a large segment of the population to purchase a home, homeownership again became a dream. With the resurgence of the American dream came innovative ways in which the dream could again become reality. These included variable rate financing, programs in which the developer subsidizes the prospective purchaser by buying down the interest rate, thereby making it easier for the buyer to qualify for a loan, and incentives such as little or no down payment and reduced closing costs.

With few exceptions, the trend toward ownership housing described for the state as a whole also holds true for localities within Virginia. Table 11 shows that nearly every locality exhibited increases in the number of owner-occupied units between 1970 and 1980. The table also shows that owner-occupied housing comprises a larger percentage of the total inventory in counties than in cities. This trend became even more pronounced during the decade of the 1970s. In 1980, nearly three-fourths of all housing units located in counties were owner-occupied, up from 68 percent in 1970. In comparison, less than 56 percent of the total housing unit inventory in cities was owner-occupied in both 1970 and 1980.

Mobility of Virginia Residents

Even though the trend in tenure has been toward ownership housing, which implies a certain degree of stability, Virginians continue to be a highly mobile population. This characteristic remained virtually unchanged from 1970 to 1980. As Table 12 shows, renters continue to be more mobile than owners. This finding is not unexpected and is consistent with historical trends. Slightly over 88 percent of householders who rent moved into their current unit in the ten years preceding the census, as compared with only 57 percent of owners. Similarly, only 4.5 percent of renters had been in their residence more than twenty years compared to over a fourth of homeowners.

As Table 12 clearly demonstrates, mobility patterns changed very little between 1970 and 1980 for both owners and renters. Given the poor housing market of the late 1970s, it might have been expected that people would tend to remain in their place of residence, particularly in the case of homeowners who may have found it difficult to sell their homes. However, the statistics do not indicate that the housing market had any such impact on residential mobility patterns. In fact, the reverse seems to be true. The percentage of households that changed residences in the five years preceding the 1980 census, when the housing market was at its worst, was higher than for the comparable period preceding the 1970 census, when the housing market was healthier.

Table 13 provides residential mobility data on households as of 1980 for all counties and independent cities in the state. Several localities experienced significant levels of household mobility during the fifteen-month period preceding the 1980 census. Those localities in which 30 percent or more of their households moved just prior to the census include the cities of Alexandria, Williamsburg, Virginia Beach, Manassas, Charlottesville, and Norfolk and Prince William County. For the most part, these jurisdictions are characterized by significant new construction, college populations, and/or a sizable military population, all of which result in a high degree of mobility. At the other extreme, localities with the lowest household mobility between 1979 and March 1980 are predominantly rural, with little new construction and no major institutions which would generate greater amounts of mobility.

One of the more interesting mobility statistic concerns the level of mobility which occurred within the five years preceding the 1980 census. Between 1975 and 1980, slightly over half of all households in the state had changed residences, reflecting a considerable amount of mobility. This high degree of residential mobility has a significant impact on the localities involved. For example, mobility affects the volume of real estate transactions, school enrollments, neighborhood stability, and the demand for water and sewer services. In general, the greater the amount of residential mobility, the more difficult it is for local governments to project revenues and plan for capital improvements.

Condition of Housing

Over the years, the way in which the quality of housing units is measured has changed. As late as 1960, census enumerators not only asked questions of respondents concerning type of plumbing and other equipment, but also classified the overall condition of the housing unit as sound, deteriorated, or dilapidated. Taken together, these indicators were considered fairly accurate measures of housing quality. Field checks conducted by the Bureau of the Census revealed, however, that the enumerators' determination of housing conditions, although based on specific criteria, was too subjective. One enumerator may have classified a housing unit as sound, while another enumerator may have classified the same unit as deteriorated. The result was a lack of uniformity in the reporting of housing condition. Because of the questionable housing condition data, the Bureau of the Census ceased the practice of classifying the condition of housing units with the 1970 census. Housing condition is now determined by such factors as extent of overcrowding and type of plumbing and household equipment.

Overcrowding. It was noted in the previous section that the average size of housing units in Virginia increased between 1970 and 1980, while the average number of persons per household declined. Given this trend, we would expect that the extent of overcrowding, as measured by persons per room, would decline. Table 14 does in fact bear out this expectation. The trend between 1970 and 1980, which is actually a continuation of a long-term trend, is toward fewer persons per room and less incidence of overcrowding.

Evidence of this decline in overcrowding is clearly shown in the changing distribution of units by number of persons per room. For example, the number of units in the lowest density category of 0.50 or less persons per room increased by slightly over 510,000 units or nearly 72 percent, accounting for almost two-thirds of all units in 1980. In 1970, such units comprised over half of the total inventory. At the same time, units containing 1.51 or more persons per room, representing severely overcrowded conditions, declined both in number and as a percentage of the total. This was also true of both the intermediate categories, 1.01-1.50 and 0.76-1.00 persons per room. Again, this clearly reflects an improvement in living conditions.

Plumbing Characteristics. Overall, housing units in Virginia showed an improvement in plumbing characteristics over the decade of the 1970s. Table 15 shows how plumbing characteristics have changed over the past ten years. Between 1970 and 1980, the number of housing units lacking complete plumbing facilities declined in number by 98,000 units and fell from 13 percent of all units to just over five percent.

As might be expected, the condition of housing units, as measured by plumbing facilities, varies from locality to locality and differs on a city-county basis. As Figure 10 clearly shows, cities have a lower percentage of units lacking complete plumbing facilities than the more rural jurisdictions. In fact, nearly every city has housing unit inventories in which less than five percent of the units lack complete plumbing facilities. Similarly, urban counties adjacent to the cities have equally low percentages of units lacking complete plumbing, while rural counties have the highest percentage. These areas contain older housing units built before localities established many of the current building codes. In addition, these rural areas have experienced little new construction. Both characteristics would tend to reduce the percentage of units lacking complete plumbing facilities.

In addition to an increase in the number of units with complete plumbing facilities, the average number of bathrooms available in each unit has also increased. As Table 15 shows, housing units with two or more bathrooms exhibited the largest percentage and numerical gain among the four categories, more than doubling in the ten-year period. In 1970, housing with two or more bathrooms accounted for less than a fifth of all dwelling units, while by 1980 the percentage had increased to over a fourth. Units with 1½ baths also exhibited sizable increases between 1970 and 1980. Only the category of no bathrooms showed a percentage and numerical decline.

As the state's urbanized area expanded during the 1970s, producing a larger system of publically-provided utilities, a greater number of housing units in the state came to rely on public agencies for their water and sewage disposal. At the same time, proportionally fewer units are relying on private systems. Between 1970 and 1980, the number of units served by water from a public system increased by almost 428,000 units or 41.0 percent. Although units supplied by well water also increased, by nearly 104,000 units, the proportion of units served by well water declined slightly during the decade. Units relying on other sources of water--cisterns, running streams, lakes, and rivers--declined in number by slightly over 16,000 units.

Methods of sewage disposal exhibited similar trends with a greater reliance on publically-provided sewage disposal. Between 1970 and 1980, the number of units served by public systems increased by nearly 410,000 units, while units served by septic tanks or cesspools showed a smaller numerical gain, but a slightly higher percentage increase. Units with other means of sewage disposal, including outhouses, declined in number by over 80,000 units and, as of 1980, accounted for only 4.5 percent of all units as compared to 11.5 percent in 1970.

These changes, including a decline in the number of units lacking complete plumbing, an increase in number of bathrooms, and greater reliance on publically-provided water supply and sewage disposal, clearly indicate an improvement in housing conditions. This trend is the result of significant new residential construction occurring in the state over the past ten years and the removal of older units which accounted for a large number of units in which sanitary conditions were lacking. In addition, stricter health regulations and the establishment of ordinances requiring that units be connected to public systems where such systems exist for that purpose, reduced the likelihood that a housing unit could be built with incomplete plumbing.

Characteristics of Household Equipment

Just as the condition of the state's housing inventory has improved with respect to plumbing characteristics, Table 16 shows that the inventory has improved in terms of equipment and amenities. For example, the number of units lacking complete kitchen facilities declined both in number and percentage of all units between 1970 and 1980 to a point where only 82,000, or 4.1 percent, are considered lacking in kitchen facilities.

Air Conditioning. Although not too many years ago air conditioning was considered a luxury item, statistics for 1980 show that the presence of air conditioning has become commonplace in Virginia's homes. Between 1970 and 1980, the number of units with central air conditioning increased by 514,600 units or 204 percent and increased as a proportion of all housing units from 17 percent to 38 percent. Housing units relying on room air conditioners also increased during the decade, although the proportion of units with room air conditioners remained virtually unchanged. At the same time, the number of units with no air conditioning declined by over 137,600 units and currently account for only a third of all dwelling units, down from over half ten years earlier.

Figure 11 again shows that urban areas fare better than rural areas in terms of housing amenities, such as air conditioning. Nearly every jurisdiction comprising the Northern Virginia area had dwelling units inventories in which 75 percent or more of the units had air conditioning. Other metropolitan areas, including the Richmond and Petersburg SMSAs and the Tidewater area of the state, showed similar characteristics. Only those localities comprising the southwest portion of Virginia and the string of contiguous counties boardering the state of West Virginia had inventories in which fewer than 25 percent of the units contained air conditioning. This finding is the result of two factors, including: (1) the generally poor condition of housing in these areas and (2) climatic conditions which make air conditioning less necessary than in other areas of the state.

Heating Equipment. As with air conditioning, changes in type of heating equipment also reflect the trend toward centralized units. Between 1970 and 1980, the number of units with central furnaces increased by nearly 400,000 units and climbed from 39 percent of all housing units in 1970 to nearly half of

all units in 1980. This category includes electric heat pumps which, although only in scattered use in 1970, accounted for roughly 8 percent of all types of heating equipment in 1980. Other electric heating equipment showed the largest percentage gain among the various types of heating equipment, while units relying on steam or hot water systems, floor furnaces, and room heaters declined in number and as percentages of all housing units.

Of particular interest is the increase in units which rely on fireplaces, stoves, or portable heaters as their primary source of heat. Over the past decade, the number of units relying on such heating systems increased by nearly 47,500 units or 35 percent. Even though the number of units utilizing fireplaces and stoves as their primary source of heat increased, the share of all units using such systems remained unchanged at 9.2 percent. These statistics do not provide an indication, however, of the extent that persons rely on fuel-fed stoves and fireplaces to supplement their primary source of heat.

It is also interesting to note that the number of units reporting no heating equipment actually increased between 1970 and 1980 by 1,600 units. Given the improvement in housing conditions and amenities exhibited earlier, it seems unlikely that the number of units with no source of heat would increase. The most likely explanation for this occurrence is sampling error, which is introduced when data are derived from the use of a sample rather than a complete count. The data on heating equipment contained in the census publications and tapes are estimates of the actual figures that would have resulted from a complete count. As estimates, there is a standard error associated with the data. Because the number of units in the category of units with no heating equipment is so small, it is likely that sampling error alone would account for the small increase in such units between 1970 to 1980.

Other Amenities. Table 16 also shows that improvements were made to Virginia's housing stock in other areas as well. For example, the proportion of units with a telephone, although considered to be a standard household item today, increased from under 84 percent in 1970 to nearly 92 percent as of 1980. Even with this increase, over 154,000 units in the state continue to lack access to a telephone in the housing unit.

Statistics on the number of automobiles available also showed improvement over the decade. In 1970, over 233,300 units or nearly 17 percent of all dwelling units in the state had no automobile available, whereas by 1980, the number of such units had declined slightly and fell to just over 12 percent of all units. While the number of housing units with no automobile was declining, the number of housing units with one or two cars available showed both sizable numerical and percentage gains over the decade. However, the largest percentage gain--165 percent--occurred in units with three or more automobiles. As data from the 1980 census show, Virginians have continued to rely on the private automobile for their means of transportation to work rather than public transportation or other means. These statistics on the number of automobiles per housing unit reinforce the importance of the private automobile.

Heating and Cooking Fuels

During the 1970s, not only did the type of equipment in Virginia housing units change, but also the types of fuels used for heating and cooking. Table 17 indicates a trend toward greater dependency on the use of electricity for house heating, water heating, and cooking, compared to earlier decades. Over the past ten years alone, dwelling units heated by electricity increased by over 303 percent, from 124,000 units to over 500,000 units. The proportion of units heated by electricity climbed from less than nine percent of all units in 1970 to over a fourth ten years later.

While the proportion of housing units using electricity for their home heating needs was increasing, the percentage of homes relying on utility gas, fuel oil, kerosene, coal, or coke was declining. Although roughly 106,000 more units were using utility gas for heating in 1980 as compared with 1970, the percentage of units using gas declined. This decline in reliance on utility gas for home heating may be due to two factors: (1) a nationwide moratorium on residential gas hookups brought about by a shortage of natural gas during the mid-1970s and (2) the rising popularity of the electric heat pump.

At the same time, the rapidly rising cost of fuel oil and other petroleum products caused people to convert their oil-fed furnaces to some other type of heating fuel, most often electricity. Between 1970 and 1980, the number of units using fuel oil or kerosene for heat declined by over 42,000 units and fell from just under half of all units in 1970 to only a third in 1980. The use of coal or coke also declined as did other types of fuel, including purchased steam, coal dust, briquettes made of sawdust, and household waste materials. In addition, as would be expected given the high cost of home heating fuels and the proliferation of fireplaces and stoves as heating equipment, the number of units relying on wood as a heating fuel exhibited a sizable increase during the decade, increasing by nearly 200 percent.

Although some clear trends in the use of home heating fuels emerged during the 1970s, conclusions based solely on the latest ten-year period may be misleading, especially when viewed within the context of the past forty years. Figure 12 shows that the distribution of types of fuels used in Virginia housing units has changed greatly since 1940. For example, in 1940, slightly over half of all units were heated by coal or coke, while another 40 percent were heated by wood. The use of utility gas was virtually nonexistent, bottled or LP gas was not classified as a separate category, and electricity was considered as part of the category "other," accounting for less than 0.1 percent of all units.

Since 1940, however, the use of wood and coal and coke declined, while the use of fuel oil, utility gas, and electricity increased. Between 1940 and 1970, the percentage of homes relying on fuel oil increased from less than eight percent to almost half, before declining over the past decade due to rapidly escalating prices. Utility gas exhibited a similar upward trend, increasing from only 0.4 percent of all homes in 1940 to nearly a third in 1970. The use of

electricity, as noted earlier, increased rapidly during the 1970s. However, an interesting aspect of its rapid ascent is the almost total absence of electricity as a home heating fuel prior to 1970. In 1940, the number of housing units using electricity for home heating purposes was too small to warrant a separate reporting category. Even by 1960, the percentage of homes with electric heating systems comprised only 0.8 percent of the total inventory. It was not until the 1960s and 1970s that the use of electricity for heating began its rapid climb. During this period, the public became more aware of environmental concerns, such as the pollution caused by the burning of coal. At the same time, utility companies began to market electricity as a clean fuel. This marketing strategy, coupled with the increase in costs of other types of fuel and the moratorium on gas hookups, undoubtedly lead to electricity's rapid increase in the home heating fuel market.

The trend in fuels used for water heating and cooking exhibited similar characteristics over the past ten years, with the use of electricity becoming increasingly prevalent. Since 1970, only units using electricity experienced an increase in share of all housing units, rising from 44 percent to 59 percent for water heating and from 54 percent to 67 percent for cooking. All other types of fuel declined as a percentage from 1970 to 1980. It is interesting to note that, rather than relying on one fuel source for all heating and cooking needs, many units use a variety of fuels. As an example, electricity is the predominant fuel source for cooking and heating water, while its use as a home heating fuel lags behind fuel oil and utility gas. It appears, then, that builders or homeowners make decisions about the type of fuel to be used depdending on how it is to be used. The decision may be based on the availability of certain fuels or the cost factors associated with each type of fuel and its intended use.

This section has shown that Virginia's housing inventory is characterized by owner-occupied housing, a trend which began in the 1940s, and a high degree of mobility. In addition, the data clearly reflect significant improvement in the physical condtion of the housing and the conditions under which the occupants live.

In the final section, the discussion turns to the financial characteristics of the state's housing unit inventory and how these characteristics have changed over the decade of the 1970s.

Table 10. Housing Tenure, Virginia, 1940-1980

Year	Total	Owner-Occupied		Renter-Occupied	
	Occupied Units	Number	Percent	Number	Percent
1940	627,532	306,688	48.9	320,844	51.1
1950	845,259	465,933	55.1	379,326	44.9
1960	1,072,840	658,078	61.3	414,762	38.7
1970	1,390,635	863,164	62.0	527,471	38.0
1980	1,863,073	1,221,590	65.6	641,483	34.4

Figure 9.
Housing Tenure in Virginia, 1940-1980

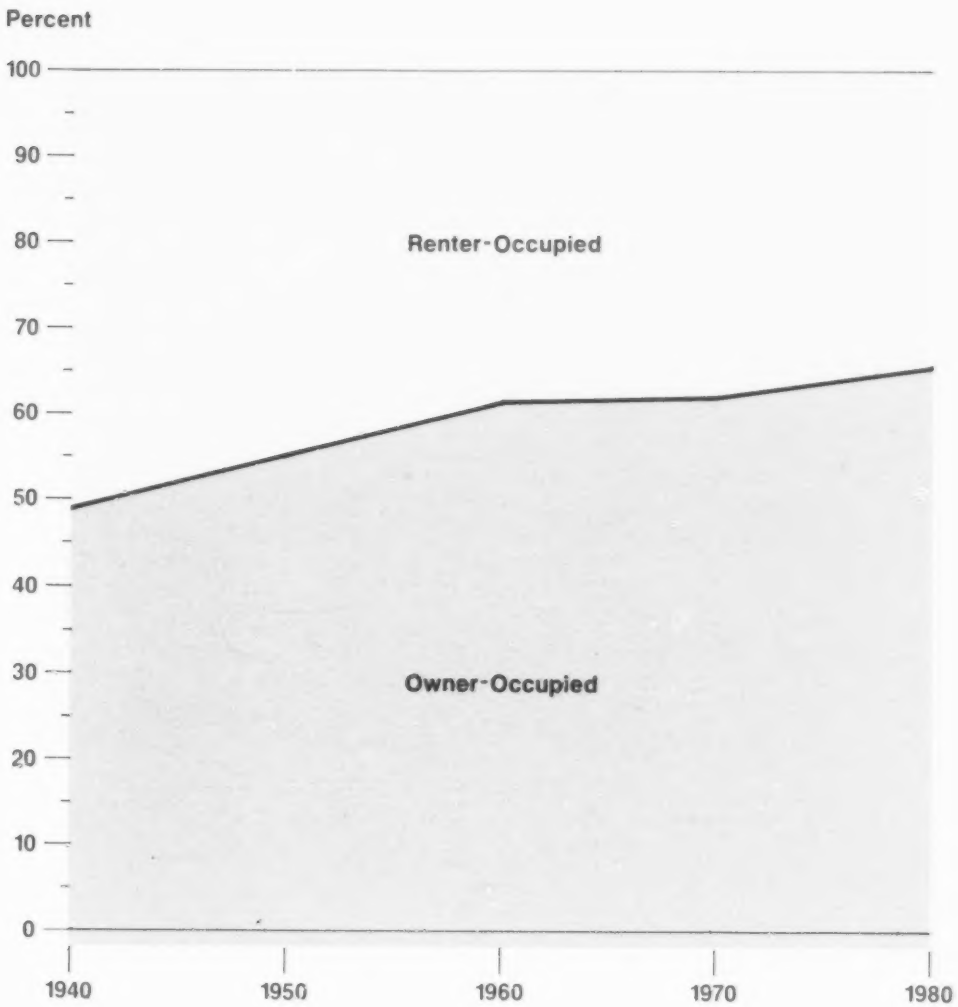


Table 11. Owner-Occupied Housing in Virginia Localities
1970 and 1980

Locality	1970		1980		Numeric Change 1970-1980	Percent Change 1970-1980
	Number	Percent	Number	Percent		
Counties:						
Accomack	6,757	69.6	8,673	74.8	1,916	28.4
Albemarle	6,758	64.1	11,388	60.4	4,630	68.5
Alleghany	2,871	78.6	3,904	80.5	1,033	36.0
Amelia	1,549	74.2	2,236	81.1	687	44.4
Amherst	4,807	74.3	7,048	78.6	2,241	46.6
Appomattox	2,161	74.3	3,276	80.8	1,115	51.6
Arlington	23,273	33.5	27,616	38.6	4,343	18.7
Augusta	9,738	76.9	13,935	77.5	4,197	43.1
Bath	1,148	67.9	1,444	73.6	296	25.8
Bedford	6,207	79.1	10,088	84.2	3,881	62.5
Bland	1,272	80.4	1,764	84.9	492	38.7
Botetourt	4,246	77.2	6,605	82.8	2,359	55.6
Brunswick	2,883	65.7	3,731	74.3	848	29.4
Buchanan	5,650	67.5	9,337	79.2	3,687	65.3
Buckingham	2,235	74.2	2,983	77.3	748	33.5
Campbell	9,871	77.3	12,134	80.2	2,263	22.9
Caroline	2,807	75.1	4,568	79.8	1,761	62.7
Carroll	6,118	84.5	8,163	83.8	2,045	33.4
Charles City	1,254	85.5	1,660	85.0	406	32.4
Charlotte	2,316	70.8	3,096	76.4	780	33.7
Chesterfield	16,616	76.2	36,024	78.6	19,408	116.8
Clarke	1,577	63.5	2,477	70.5	900	57.1
Craig	861	77.1	1,190	82.0	329	38.2
Culpeper	3,515	66.0	5,365	70.5	1,850	52.6
Cumberland	1,370	77.6	2,066	80.7	696	50.8
Dickenson	3,312	73.2	5,240	81.8	1,928	58.2
Dinwiddie	3,817	67.0	5,149	80.2	1,332	34.9
Essex	1,556	75.7	2,381	78.3	825	53.0
Fairfax	81,532	64.1	138,943	67.7	57,411	70.4
Fauquier	4,284	56.5	7,665	66.0	3,381	78.9
Floyd	2,657	85.9	3,520	85.0	863	32.5
Fluvanna	1,734	78.5	2,678	78.8	944	54.4
Franklin	5,991	78.2	9,616	81.1	3,625	60.5
Frederick	6,297	73.5	9,168	80.0	2,871	45.6
Giles	4,044	77.9	5,080	80.9	1,036	25.6

Table 11. (continued)

Locality	1970		1980		Numeric Change 1970-1980	Percent Change 1970-1980
	Number	Percent	Number	Percent		
Gloucester	3,712	83.8	5,871	82.2	2,159	58.2
Goochland	2,044	78.9	2,960	80.5	916	44.8
Grayson	3,863	77.8	4,925	82.1	1,062	27.5
Greene	1,078	74.6	2,008	78.6	930	86.3
Greensville	1,719	66.4	2,505	72.7	786	45.7
Halifax	5,473	64.3	7,433	73.0	1,960	35.8
Hanover	8,578	81.7	13,619	83.7	5,041	58.8
Henrico	34,457	71.3	44,252	66.0	9,795	28.2
Henry	11,586	78.5	15,784	80.7	4,198	36.2
Highland	666	79.5	873	78.7	207	31.1
Isle of Wight	3,296	65.6	5,457	77.4	2,161	65.6
James City	3,213	70.5	5,524	72.3	2,311	71.9
King and Queen	1,306	82.0	1,714	83.4	408	31.2
King George	1,640	69.5	2,604	74.1	964	58.8
King William	1,591	73.8	2,455	79.4	864	54.3
Lancaster	2,566	84.9	3,374	85.7	808	31.5
Lee	4,539	69.5	6,804	76.4	2,265	49.9
Loudoun	6,836	65.7	13,506	72.4	6,670	97.6
Louisa	3,218	79.6	4,859	81.5	1,641	51.0
Lunenburg	2,512	71.3	3,238	76.1	726	28.9
Madison	1,858	73.0	2,672	78.3	814	43.8
Mathews	2,203	88.0	2,664	85.4	461	20.9
Mecklenberg	5,423	62.4	7,129	70.2	1,706	31.5
Middlesex	1,705	82.0	2,439	83.5	734	43.0
Montgomery	8,500	64.0	11,947	57.4	3,447	40.6
Nelson	2,471	70.7	3,280	76.9	809	32.7
New Kent	1,212	81.5	2,491	84.9	1,279	105.5
Northampton	2,706	57.8	3,378	62.6	672	24.8
Northumberland	2,622	85.6	3,283	86.1	661	25.2
Nottoway	3,110	73.0	3,802	75.8	692	22.2
Orange	3,064	71.6	4,651	74.4	1,587	51.8
Page	4,015	76.0	5,358	77.4	1,343	33.4
Patrick	3,810	80.7	5,119	82.3	1,309	34.4
Pittsylvania	11,278	68.0	16,896	76.3	5,618	49.8
Powhatan	1,341	76.4	3,048	85.1	1,707	127.3

Table 11. (continued)

Locality	1970		1980		Numeric Change 1970-1980	Percent Change 1970-1980
	Number	Percent	Number	Percent		
Prince Edward	2,658	67.4	3,541	71.7	883	33.2
Prince George	3,368	59.1	4,028	61.7	660	19.6
Prince William	18,743	79.6	31,325	71.6	12,582	67.1
Pulaski	6,586	73.0	9,209	74.4	2,623	39.8
Rappahannock	1,050	68.0	1,487	69.3	437	41.6
Richmond	1,464	83.5	2,035	83.9	571	39.0
Roanoke	16,503	83.0	19,524	77.4	3,021	18.3
Rockbridge	3,717	74.1	4,811	76.1	1,094	29.4
Rockingham	10,571	75.7	14,787	77.5	4,216	39.9
Russell	5,184	73.8	8,511	80.1	3,327	64.2
Scott	5,453	73.6	6,757	77.2	1,304	23.9
Shenandoah	5,467	72.6	7,622	76.0	2,155	39.4
Smyth	6,636	73.7	8,668	75.8	2,032	30.6
Southampton	2,842	57.8	3,953	68.5	1,111	39.1
Spotsylvania	3,639	77.2	8,789	80.9	5,150	141.5
Stafford	5,121	76.4	10,118	83.1	4,997	97.6
Surry	1,074	68.1	1,482	73.8	408	38.0
Sussex	1,918	63.2	2,542	71.1	624	32.5
Tazewell	8,613	72.0	13,407	78.5	4,794	55.7
Warren	3,291	66.1	5,528	71.3	2,237	68.0
Washington	9,285	74.6	12,509	78.8	3,224	34.7
Westmoreland	2,928	79.1	4,219	83.7	1,291	44.1
Wise	7,691	72.3	11,565	78.5	3,874	50.4
Wythe	4,964	73.4	6,877	76.4	1,913	38.5
York	4,963	68.1	7,406	68.0	2,443	49.2
Cities:						
Alexandria	11,046	26.0	17,876	36.5	6,830	61.8
Bedford	1,334	67.5	1,545	67.2	211	15.8
Bristol	3,044	63.2	4,819	66.6	1,775	58.3
Buena Vista	1,301	67.6	1,717	75.7	416	32.0
Charlottesville	6,583	48.2	6,937	45.0	354	5.4
Chesapeake	18,098	72.0	26,462	72.7	8,364	46.2
Clifton Forge	1,234	65.8	1,341	70.7	107	8.7
Colonial Heights	3,420	72.2	4,427	75.4	1,007	29.4
Covington	2,153	64.6	2,371	67.5	218	10.1
Danville	9,489	61.4	10,902	62.3	1,413	14.9

Table 11. (continued)

Locality	1970		1980		Numeric Change 1970-1980	Percent Change 1970-1980
	Number	Percent	Number	Percent		
Emporia	826	47.7	996	56.8	170	20.6
Fairfax	3,632	59.3	4,353	63.3	721	19.8
Falls Church	1,859	50.4	2,270	53.4	411	22.1
Franklin	1,069	50.6	1,413	54.6	344	32.2
Fredericksburg	2,211	48.4	2,597	43.8	386	17.5
Galax	1,472	68.4	1,867	71.1	395	26.8
Hampton	21,871	63.2	25,430	61.3	3,559	16.3
Harrisonburg	2,297	53.1	2,938	49.3	641	27.9
Hopewell	4,437	61.2	5,237	61.6	800	18.0
Lexington	1,172	54.9	1,226	56.3	54	4.6
Lynchburg	10,394	59.5	14,804	61.8	4,410	42.4
Manassas	1,711	63.2	3,432	68.0	1,721	100.6
Manassas Park	1,170	77.3	1,329	71.5	159	13.6
Martinsville	3,898	64.7	4,406	66.4	508	13.0
Newport News	21,378	55.3	26,682	52.0	4,804	22.0
Norfolk	37,193	42.9	38,575	43.9	1,382	3.7
Norton	781	59.4	1,159	70.1	378	48.4
Petersburg	5,609	49.8	7,932	53.2	2,323	41.4
Poquoson	1,379	85.5	2,463	88.6	1,084	78.6
Portsmouth	19,064	55.3	21,161	57.6	2,097	11.0
Radford	2,127	68.4	2,505	63.3	378	17.8
Richmond	40,618	49.1	40,462	47.1	-156	-0.4
Roanoke	19,464	61.0	23,776	59.4	4,312	22.2
Salem	4,681	70.4	5,696	65.9	1,015	21.7
South Boston	1,418	63.1	1,849	70.7	431	30.4
Staunton	4,807	64.9	5,364	66.2	557	11.6
Suffolk	7,817	59.5	10,806	68.6	2,989	38.2
Virginia Beach	30,865	68.4	54,693	64.2	23,828	77.2
Waynesboro	3,628	67.8	3,907	66.6	279	7.7
Williamsburg	949	35.4	920	32.6	71	8.4
Winchester	2,407	48.0	4,112	51.6	1,705	70.8
Total Counties	542,877	68.3	818,833	71.8	275,956	50.8
Total Cities	320,287	55.7	402,757	55.7	82,470	25.8
Total Virginia	863,164	62.9	1,221,590	65.6	358,426	41.5

Table 12. Mobility of Households by Tenure, Virginia, 1970 and 1980

Tenure/Year Moved	1970		1980	
	Number	Percent	Number	Percent
Owner-Occupied:				
1970 to March 1980	490,291	56.8	693,658	56.8
1979-March 1980	91,339	10.6	149,503	12.2
1975-1978	225,294	26.1	329,932	27.1
1970-1974	173,658	20.1	214,223	17.5
1960-1969	193,902	22.5	262,405	21.5
1959 or earlier	178,878	20.7	265,527	21.7
Total	863,071	100.0	1,221,590	100.0
Renter-Occupied:				
1970 to March 1980	466,204	88.4	566,399	88.3
1979-March 1980	224,040	42.5	284,982	44.4
1975-1978	185,208	35.1	214,252	33.4
1970-1974	56,956	10.8	67,165	10.5
1960-1969	36,228	6.9	45,958	7.2
1959 or earlier	25,132	4.7	29,126	4.5
Total	527,564	100.0	641,483	100.0

Table 13. Mobility of Households in Virginia Localities, 1980

Locality	Moved 1979-1980		Moved 1975-1978		Moved 1970-1974	
	Number	Percent	Number	Percent	Number	Percent
Counties:						
1. Accomack	1,501	12.9	2,361	20.4	2,154	18.6
2. Albemarle	5,516	29.2	6,024	31.9	2,634	13.9
3. Alleghany	570	11.8	1,248	25.7	841	17.3
4. Amelia	296	10.7	704	25.5	501	18.2
5. Amherst	1,444	16.1	2,258	25.2	1,669	18.6
6. Appomattox	538	13.3	1,181	29.1	784	19.3
7. Arlington	21,139	29.5	23,258	32.5	8,480	11.8
8. Augusta	3,215	17.9	4,964	27.6	2,934	16.3
9. Bath	333	17.0	499	25.4	315	16.1
10. Bedford	1,937	16.2	3,759	31.4	1,881	15.7
11. Bland	284	13.7	468	22.5	382	18.4
12. Botetourt	1,191	14.9	2,246	28.2	1,457	18.3
13. Brunswick	570	11.4	1,130	22.5	1,012	20.2
14. Buchanan	1,885	16.0	3,463	29.4	2,176	18.5
15. Buckingham	426	11.0	949	24.6	664	17.2
16. Campbell	2,640	17.4	4,276	28.3	2,767	18.3
17. Caroline	798	13.9	1,685	29.5	1,132	19.8
18. Carroll	1,309	13.4	2,046	21.0	1,766	18.1
19. Charles City	240	12.3	425	21.8	353	18.1
20. Charlotte	474	11.7	663	16.4	741	18.3
21. Chesterfield	11,897	26.0	16,272	35.5	7,574	16.5
22. Clarke	545	15.5	965	27.5	609	17.3
23. Craig	186	12.8	324	22.3	323	22.2
24. Culpeper	1,470	19.3	2,003	26.3	1,418	18.6
25. Cumberland	274	10.7	625	24.4	579	22.6
26. Dickenson	954	14.9	1,867	29.2	1,178	18.4
27. Dinwiddie	723	11.3	1,691	26.3	1,409	21.9
28. Essex	376	12.4	749	24.6	661	21.7
29. Fairfax	60,209	29.3	72,313	35.2	29,391	14.3
30. Fauquier	2,577	22.2	3,547	30.6	1,821	15.7
31. Floyd	574	13.9	890	21.5	704	17.0
32. Fluvanna	590	17.4	928	27.3	581	17.1
33. Franklin	1,800	15.2	2,963	25.0	2,073	17.5
34. Frederick	2,201	19.2	3,456	30.1	2,073	18.1
35. Giles	867	13.8	1,421	22.6	986	15.7

Moved 1960-1969		Moved 1950-1959		Moved 1949 or Earlier		
Number	Percent	Number	Percent	Number	Percent	
2,192	18.9	1,458	12.6	1,934	16.7	1.
2,600	13.8	1,030	5.5	1,082	5.7	2.
1,004	20.7	542	11.2	646	13.3	3.
483	17.5	265	9.6	509	18.5	4.
1,617	18.0	1,012	11.3	962	10.7	5.
805	19.9	288	7.1	457	11.3	6.
10,076	14.1	5,313	7.4	3,349	4.7	7.
3,220	17.9	1,711	9.5	1,934	10.8	8.
346	17.6	168	8.6	300	15.3	9.
2,009	16.8	1,118	9.3	1,281	10.7	10.
343	16.5	265	12.8	336	16.2	11.
1,474	18.5	728	9.1	876	11.0	12.
990	19.7	568	11.3	749	14.9	13.
1,951	16.6	1,046	8.9	1,261	10.7	14.
837	21.7	437	11.3	546	14.1	15.
3,022	20.0	1,260	8.3	1,165	7.7	16.
855	14.9	595	10.4	656	11.5	17.
1,872	19.2	1,179	12.1	1,569	16.1	18.
419	21.5	271	13.9	245	12.5	19.
841	20.8	566	14.0	765	18.9	20.
6,197	13.5	2,328	5.1	1,553	3.4	21.
688	19.6	362	10.3	345	9.8	22.
257	17.7	159	11.0	203	14.0	23.
1,303	17.1	615	8.1	796	10.5	24.
558	21.8	186	7.3	338	13.2	25.
1,060	16.6	591	9.2	752	11.7	26.
1,214	18.9	663	10.3	721	11.2	27.
538	17.7	277	9.1	439	14.4	28.
29,823	14.5	11,212	5.5	2,218	1.1	29.
1,578	13.6	1,102	9.5	982	8.5	30.
688	16.6	484	11.7	802	19.4	31.
597	17.6	297	8.7	407	12.0	32.
2,475	20.9	1,205	10.2	1,340	11.3	33.
2,094	18.3	850	7.4	793	6.9	34.
1,252	19.9	804	12.8	950	15.1	35.

Table 13. (continued)

Locality	Moved 1979-1980		Moved 1975-1978		Moved 1970-1974	
	Number	Percent	Number	Percent	Number	Percent
36. Gloucester	1,397	19.5	2,020	28.3	1,107	15.5
37. Goochland	476	12.9	967	26.3	704	19.1
38. Grayson	749	12.5	1,336	22.3	1,072	17.9
39. Greene	486	19.0	759	29.7	372	14.6
40. Greensville	429	12.4	920	26.7	569	16.5
41. Halifax	1,089	10.7	2,544	25.0	1,840	18.1
42. Hanover	2,287	14.1	4,504	27.7	3,222	19.8
43. Henrico	15,902	23.7	19,287	28.8	9,121	13.6
44. Henry	3,001	15.3	4,646	23.7	3,304	16.9
45. Highland	211	19.0	241	21.7	122	11.0
46. Isle of Wight	1,000	14.2	2,002	28.4	1,452	20.6
47. James City	1,865	24.4	2,609	34.2	1,310	17.1
48. King and Queen	181	8.8	544	26.5	368	17.9
49. King George	590	16.8	1,053	30.0	770	21.9
50. King William	476	15.4	777	25.1	496	16.0
51. Lancaster	518	13.2	779	19.8	853	21.7
52. Lee	1,379	15.5	2,484	27.9	1,585	17.8
53. Loudoun	4,230	22.7	6,689	35.9	3,386	18.2
54. Louisa	937	15.7	1,493	25.1	1,118	18.8
55. Lunenburg	460	10.8	841	19.8	762	17.9
56. Madison	419	12.3	874	25.6	668	19.6
57. Mathews	375	12.0	660	21.2	540	17.3
58. Mecklenburg	1,393	13.7	2,375	23.4	1,862	18.3
59. Middlesex	373	12.8	626	21.4	596	20.4
60. Montgomery	6,920	33.2	6,149	29.5	2,574	12.4
61. Nelson	496	11.6	1,141	26.7	742	17.4
62. New Kent	625	21.3	919	31.3	490	16.7
63. Northampton	678	12.6	1,282	23.8	929	17.2
64. Northumberland	320	8.4	935	24.5	664	17.4
65. Nottoway	698	13.9	1,007	20.1	869	17.3
66. Orange	1,105	17.7	1,662	26.6	1,186	19.0
67. Page	1,035	14.9	1,561	22.5	1,154	16.7
68. Patrick	744	12.0	1,443	23.2	1,073	17.3
69. Pittsylvania	3,104	14.0	5,841	26.4	4,240	19.1
70. Powhatan	530	14.8	1,158	32.3	902	25.2
71. Prince Edward	855	17.3	1,390	28.2	735	14.9
72. Prince George	1,918	29.5	2,096	32.2	990	15.2
73. Prince William	14,824	33.9	16,040	36.6	6,112	14.0
74. Pulaski	2,338	18.9	3,161	25.5	2,056	16.6
75. Rappahannock	362	16.9	541	25.2	345	16.1

Moved 1960-1969		Moved 1950-1959		Moved 1949 or Earlier		
Number	Percent	Number	Percent	Number	Percent	
1,180	16.5	518	7.2	924	12.9	36.
675	18.4	342	9.3	514	14.0	37.
1,272	21.2	730	12.2	839	14.0	38.
462	18.1	214	8.4	261	10.2	39.
684	19.8	471	13.7	373	10.8	40.
2,010	19.7	1,334	13.1	1,365	13.4	41.
3,368	20.7	1,556	9.6	1,330	8.2	42.
12,150	18.1	7,625	11.4	2,952	4.4	43.
4,662	23.8	2,488	12.7	1,468	7.5	44.
137	12.4	105	9.5	293	26.4	45.
1,181	16.8	685	9.7	726	10.3	46.
1,054	13.8	438	5.7	363	4.8	47.
303	14.7	262	12.7	398	19.4	48.
494	14.1	334	9.5	272	7.7	49.
494	16.0	386	12.5	462	14.9	50.
693	17.6	512	13.0	584	14.8	51.
1,276	14.3	845	9.5	1,335	15.0	52.
2,422	13.0	948	5.1	978	5.2	53.
1,016	17.0	610	10.2	785	13.2	54.
859	20.2	540	12.7	793	18.6	55.
646	18.9	396	11.6	409	12.0	56.
621	19.9	310	9.9	612	19.6	57.
1,799	17.7	1,328	13.1	1,397	13.8	58.
503	17.2	261	8.9	563	19.3	59.
2,632	12.6	1,267	6.1	1,289	6.2	60.
698	16.4	436	10.2	754	17.7	61.
472	16.1	159	5.4	269	9.2	62.
923	17.1	724	13.4	858	15.9	63.
638	16.7	557	14.6	699	18.3	64.
918	18.3	604	12.0	921	18.4	65.
945	15.1	673	10.8	681	10.9	66.
1,280	18.5	740	10.7	1,154	16.7	67.
1,313	21.1	791	12.7	855	13.7	68.
4,060	18.3	2,438	11.0	2,464	11.1	69.
522	14.6	165	4.6	303	8.5	70.
750	15.2	607	12.3	600	12.2	71.
870	13.4	295	4.5	338	5.2	72.
5,226	11.9	1,028	2.3	560	1.3	73.
2,047	16.5	1,187	9.6	1,591	12.9	74.
369	17.2	220	10.3	308	14.4	75.

Table 13. (continued)

Locality	Moved 1979-1980		Moved 1975-1978		Moved 1970-1974	
	Number	Percent	Number	Percent	Number	Percent
76. Richmond	268	11.1	488	20.1	445	18.4
77. Roanoke	5,108	20.2	7,438	29.1	4,430	17.6
78. Rockbridge	964	15.2	1,524	24.1	1,074	17.0
79. Rockingham	3,084	16.2	4,659	24.4	3,323	17.4
80. Russell	1,51[illegible]	14.3	2,973	28.0	2,251	21.2
81. Scott	1,169	13.4	2,061	23.6	1,281	14.6
82. Shenandoah	1,441	14.4	2,492	24.8	1,811	18.0
83. Smyth	1,757	15.4	2,625	23.0	2,015	17.6
84. Southampton	723	12.5	1,442	25.0	1,105	19.1
85. Spotsylvania	2,462	22.7	4,088	37.6	1,707	15.7
86. Stafford	2,732	22.4	4,245	34.9	1,834	15.1
87. Surry	256	12.7	402	20.0	383	19.1
88. Sussex	474	13.3	716	20.0	673	18.8
89. Tazewell	2,991	17.5	4,561	26.7	3,218	18.8
90. Warren	1,439	18.6	2,300	29.7	1,449	18.7
91. Washington	2,624	16.5	4,340	27.4	2,818	17.8
92. Westmorland	592	11.7	1,247	24.7	1,012	20.1
93. Wise	2,342	15.9	4,389	29.8	2,516	17.1
94. Wythe	1,577	17.5	2,285	25.4	1,429	15.9
95. York	2,773	25.5	3,199	29.4	1,637	15.0
Cities:						
96. Alexandria	17,027	34.7	18,352	37.5	5,290	10.8
97. Bedford	466	20.3	610	26.5	302	13.1
98. Bristol	1,467	20.3	1,782	24.6	970	13.4
99. Buena Vista	366	16.1	540	23.8	402	17.7
100. Charlottesville	4,867	31.6	4,316	28.0	1,765	11.5
101. Chesapeake	7,583	20.8	10,819	29.7	5,432	14.9
102. Clifton Forge	301	15.9	373	19.7	254	13.4
103. Colonial Heights	1,064	18.1	1,543	26.3	986	16.8
104. Covington	497	14.2	796	22.7	436	12.4
105. Danville	3,362	19.2	4,098	23.4	2,369	13.5
106. Emporia	330	18.8	381	21.7	239	13.6
107. Fairfax	1,777	25.8	2,259	32.8	778	11.3
108. Falls Church	1,211	28.5	1,308	30.8	481	11.3
109. Franklin	462	17.9	782	30.2	457	17.7
110. Fredericksburg	1,692	28.5	1,500	25.3	842	14.2

Moved 1960-1969		Moved 1950-1959		Moved 1949 or Earlier		
Number	Percent	Number	Percent	Number	Percent	
376	15.5	331	13.6	517	21.3	76.
5,062	20.1	1,959	7.8	1,240	4.9	77.
1,223	19.3	650	10.3	889	14.1	78.
3,548	18.6	2,201	11.5	2,263	11.9	79.
1,744	16.4	948	8.9	1,196	11.3	80.
1,643	18.8	1,123	12.8	1,471	16.8	81.
1,817	18.1	1,074	10.7	1,400	14.0	82.
2,140	18.7	1,380	12.1	1,506	13.2	83.
1,257	21.8	578	10.0	669	11.6	84.
1,204	11.1	783	7.2	616	5.7	85.
1,676	13.8	828	6.8	857	7.0	86.
348	17.3	215	10.7	405	20.2	87.
775	21.7	389	10.9	546	15.3	88.
2,865	16.8	1,560	9.1	1,884	11.0	89.
1,232	15.9	573	7.4	761	9.8	90.
2,679	16.9	1,600	10.1	1,805	11.4	91.
946	18.8	462	9.2	783	15.5	92.
2,157	14.6	1,472	10.0	1,855	12.6	93.
1,428	15.9	902	10.0	1,384	15.4	94.
2,206	20.2	786	7.2	294	2.7	95.
4,826	9.8	2,165	4.4	1,344	2.7	96.
400	17.4	280	12.2	241	10.5	97.
1,423	19.7	884	12.2	712	9.8	98.
358	15.8	247	10.9	355	15.7	99.
2,075	13.5	1,393	9.0	985	6.4	100.
7,206	19.8	3,637	10.0	1,706	4.7	101.
359	18.9	198	10.4	411	21.7	102.
1,289	22.0	636	10.8	353	6.0	103.
605	17.2	512	14.6	665	18.9	104.
3,626	20.7	2,136	12.2	1,920	11.0	105.
328	18.7	230	13.1	246	14.0	106.
1,256	18.3	744	10.8	67	1.0	107.
673	15.8	370	8.7	207	4.9	108.
402	15.5	261	10.1	224	8.7	109.
813	13.7	625	10.5	455	7.7	110.

Table 13. (continued)

Locality	Moved 1979-1980		Moved 1975-1978		Moved 1970-1974	
	Number	Percent	Number	Percent	Number	Percent
111. Galax	498	19.0	648	24.7	479	18.2
112. Hampton	10,816	26.1	11,531	27.8	5,450	13.1
113. Harrisonburg	1,623	27.2	1,782	29.9	737	12.4
114. Hopewell	2,131	25.1	2,237	26.3	1,092	12.8
115. Lexington	423	19.4	425	19.5	338	15.5
116. Lynchburg	4,762	19.9	6,708	28.0	3,561	14.9
117. Manassas	1,657	32.8	1,938	38.4	664	13.2
118. Manassas Park	460	24.8	660	35.5	266	14.3
119. Martinsville	993	15.0	1,549	23.3	968	14.6
120. Newport News	15,242	29.7	14,692	28.6	6,456	12.6
121. Norfolk	26,372	30.0	22,361	25.5	11,015	12.5
122. Norton	299	18.1	463	28.0	304	18.4
123. Petersburg	3,483	23.3	4,036	27.1	2,359	15.8
124. Poquoson	596	21.4	874	31.4	419	15.1
125. Portsmouth	8,408	22.9	9,496	25.8	4,536	12.3
126. Radford	928	23.5	939	23.7	498	12.6
127. Richmond	21,190	24.7	24,588	28.7	11,623	13.5
128. Roanoke	8,980	22.4	10,031	25.1	5,691	14.2
129. Salem	1,843	21.3	2,251	26.0	1,353	15.6
130. South Boston	392	15.0	499	19.1	461	17.6
131. Staunton	1,486	18.4	2,023	25.0	1,182	14.6
132. Suffolk	2,372	15.1	3,626	23.0	2,966	18.8
133. Virginia Beach	28,394	33.3	28,778	33.8	11,097	13.0
134. Waynesboro	1,184	20.2	1,322	22.5	920	15.7
135. Williamsburg	959	34.0	774	27.4	366	13.0
136. Winchester	1,906	23.9	2,043	25.6	890	11.2
Total Counties	244,616	21.5	338,451	29.7	184,694	16.2
Total Cities	189,869	26.1	205,733	28.5	96,694	13.4
Total Virginia	434,485	23.3	544,184	29.1	281,388	15.1

Moved 1960-1969		Moved 1950-1959		Moved 1949 or Earlier		
Number	Percent	Number	Percent	Number	Percent	
401	15.3	257	9.8	342	13.0	111.
8,573	20.7	3,157	7.6	1,979	4.8	112.
921	15.5	487	8.2	406	6.8	113.
1,320	15.5	994	11.7	732	8.6	114.
400	18.4	290	13.3	303	13.9	115.
4,259	17.8	2,351	9.8	2,299	9.6	116.
545	10.8	126	2.5	118	2.3	117.
290	15.6	182	9.8	0	0.0	118.
1,322	19.9	1,029	15.5	775	11.7	119.
9,145	17.8	3,989	7.8	1,790	3.5	120.
14,013	16.0	8,976	10.2	5,065	5.8	121.
240	14.5	125	7.6	222	13.4	122.
2,715	18.2	1,251	8.4	1,076	7.2	123.
490	17.6	129	4.6	273	9.8	124.
7,235	19.7	4,513	12.3	2,558	7.0	125.
657	16.6	437	11.0	496	12.5	126.
14,075	16.4	8,576	10.0	5,745	6.7	127.
6,879	17.2	4,764	11.9	3,678	9.2	128.
1,621	18.7	886	10.2	692	8.0	129.
492	18.8	329	12.6	443	16.9	130.
1,749	21.6	954	11.8	703	8.7	131.
3,037	19.3	1,952	12.4	1,789	11.4	132.
11,861	13.9	3,860	4.5	1,165	1.4	133.
1,165	19.8	712	12.1	567	9.7	134.
430	15.2	163	5.8	128	4.5	135.
1,661	20.8	737	9.2	734	9.2	136.
187,228	16.4	95,898	8.4	89,242	7.8	
121,135	16.8	65,544	9.1	43,969	6.1	
308,363	16.6	161,442	8.7	133,211	7.2	

Table 14. Persons Per Room, Virginia, 1970 and 1980

Persons Per Room	1970		1980		Numeric Change 1970-1980	Percent Change 1970-1980
	Number	Percent	Number	Percent		
0.50 or less	711,465	51.1	1,221,512	65.6	510,046	71.7
0.51-0.75	326,897	23.5	363,938	19.5	37,041	11.3
0.76-1.00	241,404	17.4	213,542	11.5	-27,862	-11.5
1.01-1.50	80,697	5.8	48,659	2.6	-32,038	-39.7
1.51 or more	30,172	2.2	15,422	0.8	-14,750	-48.9
Total	1,390,635	100.0	1,863,073	100.0	472,438	34.0

Table 15. Plumbing Characteristics, Virginia, 1970 and 1980

Characteristic	1970		1980		Numeric Change 1970-1980	Percent Change 1970-1980
	Number	Percent	Number	Percent		
Plumbing:						
Complete	1,284,834	86.6	1,897,362	94.9	612,528	47.7
Lacking	199,317	13.4	101,331	5.1	-97,986	-49.2
Bathrooms:						
None	204,031	13.8	107,828	5.4	-96,203	-47.2
One	851,338	57.3	1,033,282	51.6	181,944	21.4
1 1/2	160,587	10.8	295,806	14.8	135,219	84.2
Two or more	268,867	18.1	563,159	28.2	294,292	109.5
Source of Water:						
Public	1,042,156	70.2	1,469,796	73.5	427,640	41.0
Well	351,898	23.7	455,556	22.8	103,658	29.5
Other	90,769	6.1	74,723	3.7	-16,046	-17.7
Sewage Disposal:						
Public	906,030	61.0	1,315,815	65.8	409,785	45.2
Septic tank	408,213	27.5	593,912	29.7	185,699	45.5
Other	170,580	11.5	90,348	4.5	-80,232	-47.0

Figure 10.
Percentage of Units Lacking Complete Plumbing Facilities by Locality, 1980

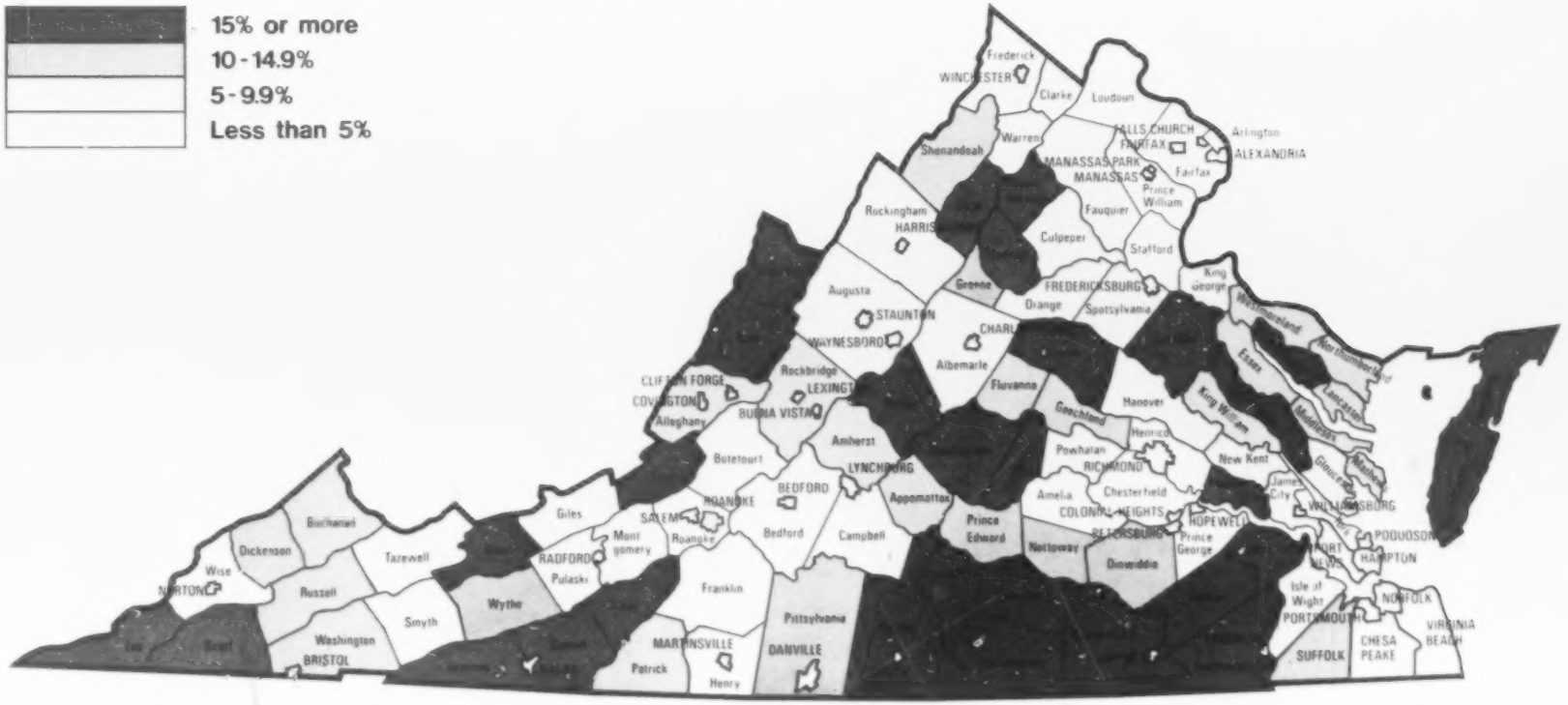


Table 16. Household Equipment Characteristics, Virginia 1970 and 1980

Characteristic	1970		1980		Numeric Change 1970-1980	Percent Change 1970-1980
	Number	Percent	Number	Percent		
Kitchen Facilities:						
Complete	1,358,323	91.5	1,918,342	95.9	560,019	41.2
Lacking	125,828	8.5	81,733	4.1	-44,095	-35.0
Heating Equipment:						
Steam or hot water	282,799	19.0	271,122	13.6	-11,677	-4.1
Central furnace	584,403	39.4	983,110	49.2	398,707	68.2
Electric heat pump	NA	NA	153,211	7.7	NA	NA
Other electric	103,751	7.0	239,939	12.0	136,188	131.3
Floor furnace	102,636	6.9	89,408	4.5	-13,228	-12.9
Room heaters with flue	228,667	15.4	186,691	9.3	-41,976	-18.4
Room heaters w/out flue	40,298	2.7	38,334	1.9	-1,964	-4.9
Fireplaces, stoves, portable heaters	137,022	9.2	184,495	9.2	47,473	34.6
None	5,376	0.4	6,976	0.3	1,600	29.8
Air Conditioning:						
None	841,489	56.7	703,861	35.2	-137,628	-16.4
Central	251,679	17.0	766,239	38.3	514,560	204.4
Room units	391,655	26.3	529,975	26.5	138,320	35.3
Telephones:						
Available	1,164,345	83.7	1,709,016	91.7	544,671	46.8
None	226,291	16.3	154,057	8.3	-72,234	-31.9
Automobiles:						
None	233,359	16.8	230,567	12.4	-2,792	-1.2
1	682,576	49.1	838,894	45.0	156,318	22.9
2	408,781	29.4	619,180	33.2	210,399	51.5
3 or more	65,919	4.7	174,432	9.4	108,513	164.6

Figure 11.
Percentage of Units Having Air Conditioning by Locality, 1980

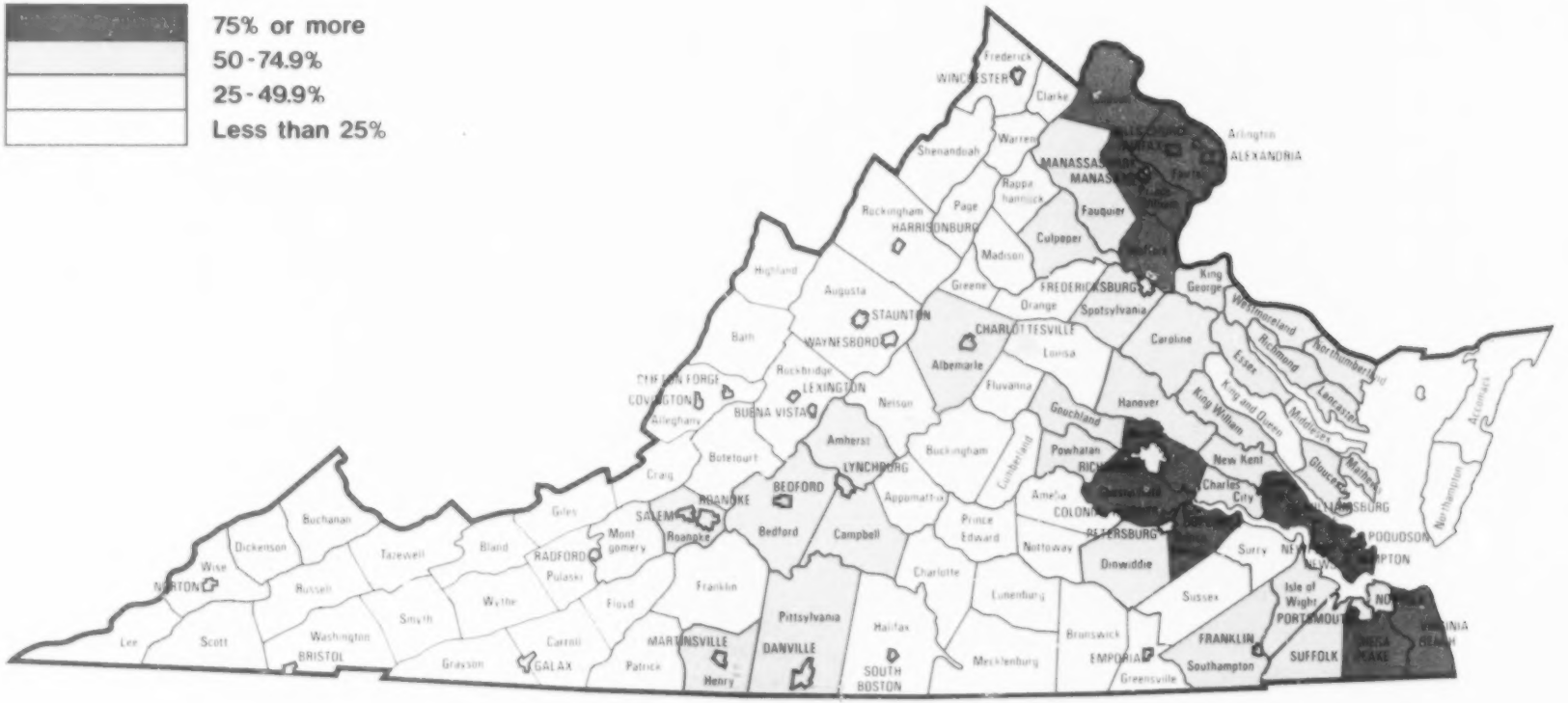
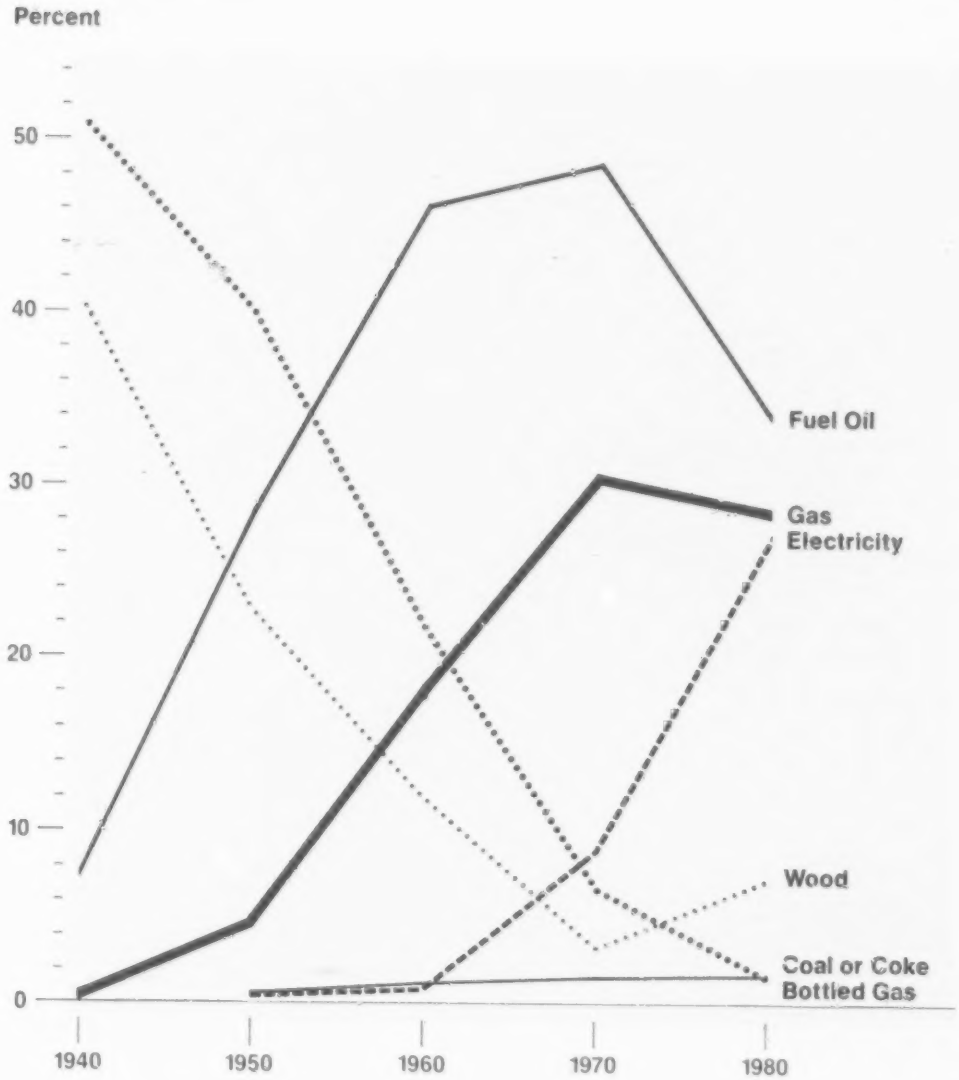


Table 17. Heating and Cooking Fuels, Virginia, 1970 and 1980

Characteristic	1970		1980		Numeric Change 1970-1980	Percent Change 1970-1980
	Number	Percent	Number	Percent		
Occupied Housing Units	1,390,636	100.0	1,863,073	100.0	472,437	34.0
House Heating Fuel:						
Utility gas	422,986	30.4	528,677	28.4	105,691	25.0
Bottled, tank, or LP	22,441	1.6	31,019	1.7	8,578	38.2
Electricity	124,097	8.9	500,243	26.8	376,146	303.1
Fuel oil or kerosene	676,033	48.6	633,466	34.0	-42,567	-6.3
Coal or coke	92,694	6.7	30,775	1.6	-61,919	-66.8
Wood	45,419	3.3	133,934	7.2	88,515	194.9
Other	5,749	0.4	2,767	0.2	-2,982	-51.9
None	1,217	0.1	2,192	0.1	975	80.1
Water Heating Fuel:						
Utility gas	454,617	32.7	525,715	28.2	71,098	15.6
Bottled, tank, or LP	39,320	2.8	45,052	2.4	5,732	14.6
Electricity	604,469	43.5	1,091,498	58.6	487,029	80.6
Fuel oil or kerosene	141,989	10.2	144,444	7.8	2,455	1.7
Other	19,899	1.4	13,598	0.7	-6,301	-31.7
No fuel used	130,342	9.4	42,766	2.3	-87,576	-67.2
Cooking Fuel:						
Utility gas	424,931	30.5	438,687	23.6	13,756	3.2
Bottled, tank, or LP	137,600	9.9	141,309	7.6	3,709	2.7
Electricity	747,954	53.8	1,248,942	67.0	500,988	67.0
Other	76,432	5.5	31,734	1.7	-44,698	-58.5
None	3,719	0.3	2,401	0.1	-1,318	-35.4

Figure 12.
Home Heating Fuels, Virginia, 1940-1980



V. FINANCIAL CHARACTERISTICS

Over the years, the financial characteristics of Virginia's housing inventory have perhaps exhibited the greatest degree of change of any housing indicator. During the past decade, with escalating interest rates and double-digit inflation, housing values and rents in the state increased substantially.

In some respects, changes in financial characteristics are more highly visible than changes in other housing characteristics. They not only impact on a periodic basis, as when individuals purchase a home or attempt to find suitable rental housing, but also on a regular basis, as when the rent comes due or the mortgage payment is made. Changes in other housing characteristics, such as the increase in dwelling unit size, changes in plumbing characteristics, or types of heating and cooling systems used, tend to occur gradually and may be hardly noticeable. However, changes in financial characteristics often have an immediate impact. An increase in mortgage interest rates reduces the number of persons who can afford to buy a home and places additional financial obligations on persons with variable rate mortgages. Rising housing values, although good news for persons who already own their homes, often price prospective buyers out of the housing market. Escalating rents usually result in a reduction of rental housing alternatives. Since the cost of providing shelter is the largest single expenditure made by most households, changes affecting the expenditure are often significant to the financial well-being of the household.

This section describes the various financial characteristics of the state's housing inventory, including values of ownership housing, rents, mortgage payments, and the relationship between income and housing costs.

Reporting of Values and Rents

There are many ways to show the significant increases in housing values and rent levels which have occurred over the past forty years. However, perhaps the most descriptive way is to show the change in categories used by the Bureau of the Census to report housing values and rent levels. Table 18 illustrates the extent the Bureau of the Census has had to adjust upward the value and rent categories used in census reports. In 1940, the distribution of owner-occupied units ranged from those with values of $300 or less to those with values of $20,000 or more. Similarly, rent levels ranged from those units renting for $3 or less per month to those with rents of $100 or more per month. With each succeeding census, the upper and lower limits of the distribution were increased until, in 1980, housing values were reported in ranges of $10,000 or less to $200,000 or more and renter-occupied units in ranges of $50 or less to $500 or more per month.

For the most part, the need to expand the reporting categories is due to inflation which has occurred over the years. Although inflation is the primary force behind increasing rents and housing values, particularly during the 1970s, most analyses of housing trends express financial characteristics in terms of current dollars only. This failure to take into account the impact of inflation often results in misleading conclusions and an overstatement of actual

change. Changes in housing values and rents will usually be expressed in this report in terms of both constant and current dollars, allowing the reader to make comparisons using both measures of change. However, as a rule, a greater emphasis will be placed on the use of constant dollars. The use of either constant or current dollars, in any event, will be well documented.

Value of Owner-Occupied Units

In both constant and current dollars, the value of owner-occupied housing units increased dramatically during the 1970s. Between 1970 and 1980, the state's median housing value, as reported by the Bureau of the Census in current dollars, increased from $17,200 to $48,000. Table 19 shows this upward trend. In 1970, for example, nearly a fourth of all owner-occupied housing units in the state had values of under $10,000, while only 3.6 percent had values in excess of $50,000. By 1980, the number of units valued at under $10,000 had declined by over 123,000 and accounted for only 3.1 percent of all owner-occupied dwellings. At the same time, the number of housing units with values of $50,000 or more increased from 25,500 to over 420,000 and accounted for nearly 45 percent of all owner-occupied units.

To a large extent, however, this percentage increase in median housing values reflects the high inflation rates of the 1970s. Between 1970 and 1980, the U.S. Consumer Price Index (CPI), which measures changes in the cost of a variety of goods and services, rose by 112 percent. When examined in terms of constant 1970 dollars, which controls for the inflation rate, the percentage increase in housing values are less dramatic but analytically more meaningful. For example, the median housing value increased 180 percent, in current dollars, between 1970 and 1980. With inflation taken into account, housing values in the state still increased by over 31 percent during the 1970s. There are many reasons for the increase in housing values over and above gains due to inflation. As noted in earlier sections of this study, dwelling units in 1980 are larger than they were in 1970, have more amenities, and contain improved heating and cooling systems. In addition to changes in physical characteristics, other factors add to the cost of the dwelling unit. These include increases in building permit and site plan review fees imposed by local governments, and fees charged for utility hook-ups. All of these factors add to the cost of the dwelling unit.

The increase in median housing values during the decade of the 1970s was a statewide phenomenon. As Table 20 shows, housing values rose in nearly every locality in the state, both in terms of current dollars and 1970 dollars. Even with inflation taken into account, nine localities experienced increases in real housing value approaching or exceeding 100 percent over the ten-year period. These localities are either rural areas characterized by low housing values or counties which experienced a large amount of new residential development during the 1970s.

In addition to median housing values and percentage changes, Table 20 also provides a rank for each locality based on its respective median housing value in 1970 and 1980. As the table shows, the large percentage increases in the rural localities had little impact on their relative ranking. These counties continue to have some of the lowest housing values in the state and showed either no change or only slight change in ranking. The large percentage increases in the rapidly growing jurisdictions, however, produced significant changes in their respective rankings within the state. For example, New Kent County had a median housing value of just under $10,000 and was ranked 110th out of 136 localities in 1970. By 1980, the county's ranking had increased to 39th in the state with a median housing value of $43,200. Similarly, Spotsylvania County, which experienced significant new residential development during the 1970s, moved from a ranking of 80th in 1970 to 22nd in 1980.

Jurisdictions with the highest median housing values in 1980 are almost exclusively located in the Northern Virginia area. Of the ten localities with the highest median housing values, only the city of Williamsburg, with the tenth highest median housing value in 1980, is located outside the Northern Virginia area. Conversely, localities with the lowest median housing values are scattered throughout the rural parts of the state rather than clustered in any particular area. Median values of owner-occupied housing range from a low of $24,100 in Lee County to a high of $95,200 in Fairfax County.

Figure 13 shows the extent to which the Northern Virginia area dominates the state with respect to values of owner-occupied housing. As the figure also shows, the area of high housing values is spreading southward from Northern Virginia and outward from other metropolitan areas. The result is a nearly contiguous line of localities with values above the statewide median extending from Northern Virginia to the Richmond and Tidewater metropolitan areas. This pattern is clearly the result of the high levels of new residential development occurring from increasing demand for housing in these areas due to significant population growth.

Rent Levels

Like the value of owner-occupied units in the state's dwelling unit inventory, rent levels also increased at a faster rate than the CPI. Between 1970 and 1980, median contract rent, the amount of rent agreed to irrespective of any utilities, services, or furnishings that may be included as part of the rent, increased from $92 per month to $207 per month, an increase of 125 percent, in current dollars. However, controlling for inflation, median contract rent actually increased by only 6.5 percent during the 1970s, or one-fifth the rate for owner-occupied housing.

Table 21 shows that the upward shift in rent levels in the state is similar to that described for owner-occupied housing. For example, in 1970, nearly a fourth of all renter-occupied housing units had rents of under $60 per month,

while less than two percent of the units were rented for $200 or more per month. By the 1980 census, only six percent of the units had rents of under $60 per month, while nearly half had rents in excess of $200 per month.

Table 22 provides median contract rents by locality for 1970 and 1980, rankings based on these medians, and the percentage change in median rent in current and constant 1970 dollars. Across the state, median contract rents ranged from a low of $56 per month in Southampton County to a high of $346 in the city of Falls Church. As might be expected, jurisdictions with the highest median contract rents are, as was the case with housing values, mostly located in Northern Virginia. Eight of the ten jurisdictions with the highest median rents are located in Northern Virginia. The two exceptions are the city of Virginia Beach, with a ranking of eighth, and Albemarle County, in the Charlottesville SMSA, with a ranking of tenth. Housing in both localities is in high demand, either because of considerable population increases or the existence of a major state university.

In general, the highest rents are found in the state's metropolitan areas, reflecting the demand for rental housing and higher incomes in these areas. At the same time, rent levels in central cities of the metropolitan areas are usually lower than the suburban counties and often under the statewide median of $207 per month. The disparities in rent between central cities and their surrounding localities reflect differences in age, condition, and mix of the rental housing. Suburban counties tend to have a higher proportion of newer rental units, which usually command higher rents than older units. In addition, they also have a larger inventory of single-family detached units, which generally have higher rents than multifamily housing units.

There are cases in which the percentage increases that occurred during the 1970s are atypical and result from a set of circumstances that are unique to that one area. An example of this is Highland County. Between 1970 and 1980, median rents in Highland County increased by nearly 161 percent in constant 1970 dollars, the largest percentage gain among all of the state's localities. Given this considerable increase in median rent, which rose from $30 in 1970 to a median of $166 in 1980, Highland County's ranking within the state changed from 132nd in 1970 to 34th in 1980, one of the most dramatic shifts among the state's 136 jurisdictions. The apparent reason for this shift, as well as a similar increase in neighboring Bath County, is the construction of the VEPCO Hydroelectric Pump Storage Project on the border of Highland and Bath counties. The influx of workers employed on the project, which began in 1977, placed a premium on rental housing and raised household incomes in the area, thereby resulting in sizable rent increases. More than likely, once the project is completed and the construction workers move out of the area to other projects, rent levels will either stabilize or decline from 1980 levels.

While most localities experienced sizable percentage gains in median contract rent during the past decade, even controlling for inflation, a third of the state's jurisdictions actually had percentage declines in median rent. The

localities which experienced declines and those which had large percentage increases, reflecting the two extremes, are shown in Figure 14. As the figure shows, localities experiencing declines in median rent are generally scattered across the state, except for a large contiguous group of cities and counties in the southeastern part of the state. The localities in which median rents declined represent a mixture of areas, including such highly urbanized areas as Arlington County and Virginia Beach City, small independent cities, and localities containing major colleges or universities.

There are many factors behind the declines in median rents in these localities. In most instances, the declines are attributable to the relationship among the supply of rental housing, the demand for rental housing, changes in income levels, and the general economic health of an area. In the case of the southeastern portion of the state, the economic conditions are clearly the dominant factor. The area, which relies heavily on manufacturing for local employment, had relatively high unemployment rates in 1980 and corresponding declines or only small increases in household income during the 1970s. At the same time, the area's rental housing inventory declined in most localities and vacancy rates were higher than the state average of 6.5 percent. All of the factors taken together generally describe an area in which one would expect rents to decline.

It is interesting that localities such as Montgomery and Albemarle counties, both of which contain large state universities, would show a decline in median rent. Normally, one would expect rent levels to increase in college-dominated areas, since rental housing is usually at a premium. By examining census data from 1970 and 1980, it was possible to account for the decline. For instance, the census data showed that the rental housing inventory in these two areas nearly doubled during the decade. However, vacancy rates as of the 1980 census were generally higher than average, reflecting a situation of supply exceeding demand. The result, as might be expected from the data, was a decline in rent levels. In addition to findings based on census data, there are other indicators which would account for the decline in rents. These include a stablization of college enrollments beginning in the mid-1970s and an effort on the part of universities to provide housing for a larger proportion of their students. Again, these factors would reduce demand for housing in the private sector, thereby reducing rent levels.

In addition to illustrating the pattern of localities in which rents declined, Figure 14 also shows those jurisdictions in which median rents increased substantially. In general, localities experiencing the largest percentage gains in median rents can be categorized into two types--predominantly rural jurisdictions on the fringe of metropolitan areas, such as the counties of Fluvanna, Powhatan, and Charles City, or totally rural localities, most of which are located on the West Virginia border. Again, the change in median rents can be attributed to relationships among income, supply, and demand. For the most part, these localities are characterized by above average increases in household income during the 1970s, relatively stable numbers of units in the rental inventory, and low vacancy rates.

Renting Versus Owning

As noted earlier, both values of owner-occupied housing and the cost of renter-occupied housing increased between 1970 and 1980. However, median values of owner-occupied housing increased at a faster rate than median contract rents. Figure 15 shows that this is not a new trend. Clearly since the 1940s, the value of owned housing has been increasing at a faster rate than the cost of rental housing.

According to a recent analysis of rental housing [3] , there are numerous reasons for this disparity in housing values and rent levels. These reasons include, but are probably not limited to, the following. First, the desire of persons to own their own home and the propensity of renters to purchase a home once they are financially able to afford to buy. Secondly, because of the tendency of persons to move out of the rental market as their incomes rise, rental units are generally occupied by lower-income households who cannot afford to buy. This, in turn, often produces a situation in which landlords are unable or unwilling to increase rents without incurring collection problems and conflicts with their tenants. Thirdly, most landlords try to avoid a rapid turnover of tenants and the possibility of having a unit remain vacant for lengthy periods of time resulting in a loss of income. Also, landlords often keep rent levels low because of the fear that, if rents increase too rapidly, local governments would institute rent controls. Finally, there is the fact that a number of landlords invest in rental housing in order to take advantage of tax breaks. Because of the tax advantages, they are often willing to take a loss on their investment.

Most of the reasons cited above for the differences in the rate of increase in housing values and rents are not quantifiable, but are accepted characteristics of renters and landlords. However, the income disparity between owners and renters is easily quantifiable. According to the 1980 census, the median income of householders who own their homes was $20,993, compared to a median income for renter householders of only $12,103.

Housing Cost-to-Income Ratios. Although these income differences between owners and renters constitute a significant finding, only when incomes are discussed within the context of median rents and monthly payments for owner-occupied housing are the differences meaningful.

The 1980 census represents the first time that the Bureau of the Census has collected information on monthly costs associated with owning a home as part of the census program. The items included in the monthly owner costs are payments for mortgages, real estate taxes, fire and hazard insurance, utilities, and fuels. The monthly costs do not take into account tax advantages, which, in effect, reduce the actual monthly payment. However, they do reflect an estimate of the monthly out-of-pocket expenses associated with owning a housing unit.

In order to relate the selected monthly owner costs to a comparable measure of monthly renters costs, it is necessary to use gross rent rather than contract rent. Gross rent is contract rent plus an estimate of the average monthly cost of fuels and utilities.

According to the 1980 census, the median monthly cost of an owner-occupied unit with a mortgage is $395. This compares to a median gross rent of $259 for a renter-occupied unit. Although monthly owner costs are about $140 higher per month than renter costs, given the sizable differences in income levels between the two groups, renters pay a higher proportion of their total household income on shelter than owners. This relationship between housing costs and household incomes is commonly expressed as a ratio. Such ratios are not only useful analytical measures, but also standards lending institutions use to determine an individual's ability to purchase a housing unit.

In order to gain a clearer understanding of this relationship between income levels and the proportion of income spent on providing shelter, an analysis was performed using census data on housing cost-to-income ratios. Table 23 presents the results of the analysis. As the table shows, the distribution of households based on the percentage of income spent on housing costs differs widely between owners and renters. For instance, nearly 60 percent of owner-occupied households spend less than 20 percent of their total household income on housing costs, compared to 36 percent of renters. At the other extreme, over a fourth of all persons who rent spend 35 percent or more of their income on housing costs, while less than 13 percent of owners spend a comparable percentage.

Traditionally, lending institutions use 25 percent of income as the standard determinant of ability to buy. Landlords, on the other hand, generally use less stringent income guidelines, since eviction from a rental unit for lack of payment is usually less financially serious and time consuming than mortgage foreclosures. The former may result in a short-term vacancy of a unit and some inconvenience for the tenants. The latter, however, often results in a lengthy process involving the law enforcement and judicial systems, and potentially serious financial problems not only for the owner-occupant, but also the mortgage holder. The distinction between owners and renters are clear in Table 23. In 1980, only a fourth of owners spent 25 percent or more of their income on housing costs. The comparable figure for renters was nearly 50 percent, representing a considerable financial burden on the household.

Mortgage Costs. Because data on monthly ownership costs were not collected in 1970, it is not possible to determine the extent such costs have increased over the past ten years. However, by using data from the censuses and making certain assumptions, it is possible to show the impact of rising housing values and interest rates on monthly principle and interest payments. Table 24 presents this analysis, which is based on median housing values in 1970 and 1980, and prevailing interest rates at these two points in time. It is important to note that the figures contained in Table 24 are not comparable to the monthly ownership housing costs discussed above, since they assume that the homeowner

purchased a dwelling unit at the median value, at existing interest rates, with a 30-year conventional loan, and a down payment of twenty percent. In addition, the figures exclude such costs as taxes, insurance, and utilities, which are included in the census estimates of monthly costs.

As would be expected, rising housing values coupled with soaring interest rates during the 1970s had a profound impact on the cost of owning a home. Although both factors resulted in higher monthly costs, rising interest rates had the larger impact. As Table 24 shows, median housing values increased by nearly 180 percent in current dollars or 31.5 percent in constant 1970 dollars. Had interest rates remained unchanged at the prevailing 1970 rate of 8.5 percent, monthly costs would have increased by the same percentage. With interest rates at 8.5 percent, the monthly principle and interest payment, based on a loan of $13,760 in 1970 and $38,400 in 1980, would have increased from $105 to $293 per month. However, with the increase in mortgage loan interest rates from 8.5 percent in 1970 to 12.5 percent in 1980, the estimated monthly cost of owning a home increased from $105 in 1970 to $410 in 1980. This represents an increase of almost 300 percent in current dollars or nearly 88 percent in 1970 dollars. Therefore, the rise in interest rates alone resulted in an increase in monthly costs for the average home buyer of approximately $117 per month.

Even with this sizable increase in the cost of owning, it is interesting that the percentage of owner-occupied housing units continued to increase during the 1970s. Given the high interest rates in the late 1970s, which resulted in a down turn in housing sales and new residential development, it might be expected that individuals and families would forego home purchases. However, two factors tended to produce high homeownership rates and probably acted to offset the poor market conditions. The first of these factors was the high demand for housing created by the entry of persons born during the baby-boom years into the housing market. The second factor concerns the financial benefits to homeownership. Even though interest rates were increasing rapidly and mortgage costs were escalating, the value of real estate was also increasing rapidly. These increases, coupled with the tax advantages, continued to make real estate a good investment. Given moderating increases in assessed values and forecasts of increasing interest rates on home mortgages, it will be interesting to see if the combination of these factors will negatively impact the homeownership market of the 1980s.

Table 18. Distributions Used to Report Housing Values and Rent Levels, 1940-1980

	Lower Limits	Upper Limits
1940:		
Owner-occupied	$300 or less	$20,000 or more
Renter-occupied	$3 or less	$100 or more
1950:		
Owner-occupied	$2,000 or less	$20,000 or more
Renter-occupied	$10 or less	$100 or more
1960:		
Owner-occupied	$5,000 or less	$35,000 or more
Renter-occupied	$20 or less	$200 or more
1970:		
Owner-occupied	$5,000 or less	$50,000 or more
Renter-occupied	$30 or less	$300 or more
1980:		
Owner-occupied	$10,000 or less	$200,000 or more
Renter-occupied	$50 or less	$500 or more

Table 19. Number of Owner-Occupied Units by Value,

Virginia, 1970 and 1980

Value	1970		1980		Numeric Change 1970-1980	Percent Change 1970-1980
	Number	Percent	Number	Percent		
Under $10,000	152,588	21.9	29,151	3.1	-123,437	-80.9
$10,000-14,999	136,786	19.6	29,083	3.1	-107,703	-78.7
$15,000-19,999	129,499	18.6	39,165	4.1	-90,334	-69.8
$20,000-24,999	91,100	13.0	55,170	5.8	-35,930	-39.4
$25,000-29,999	99,830	14.3	61,478	6.5	35,778	35.8
$30,000-34,999			74,130	7.8		
$35,000-39,999	62,666	9.0	76,263	8.0	149,274	238.2
$40,000-49,999			135,677	14.3		
$50,000-59,999	25,484	3.6	107,988	11.4	421,937	1,655.7
$60,000-79,999			154,209	16.3		
$80,000-99,999			84,212	8.9		
$100,000-149,999			74,824	7.9		
$150,000-199,999			17,233	1.8		
$200,000 or more			8,955	1.0		
Total	697,953	100.0	947,538	100.0	249,585	35.8

Figure 13.
Median Housing Values as a Percentage of the State Median by Locality, 1980

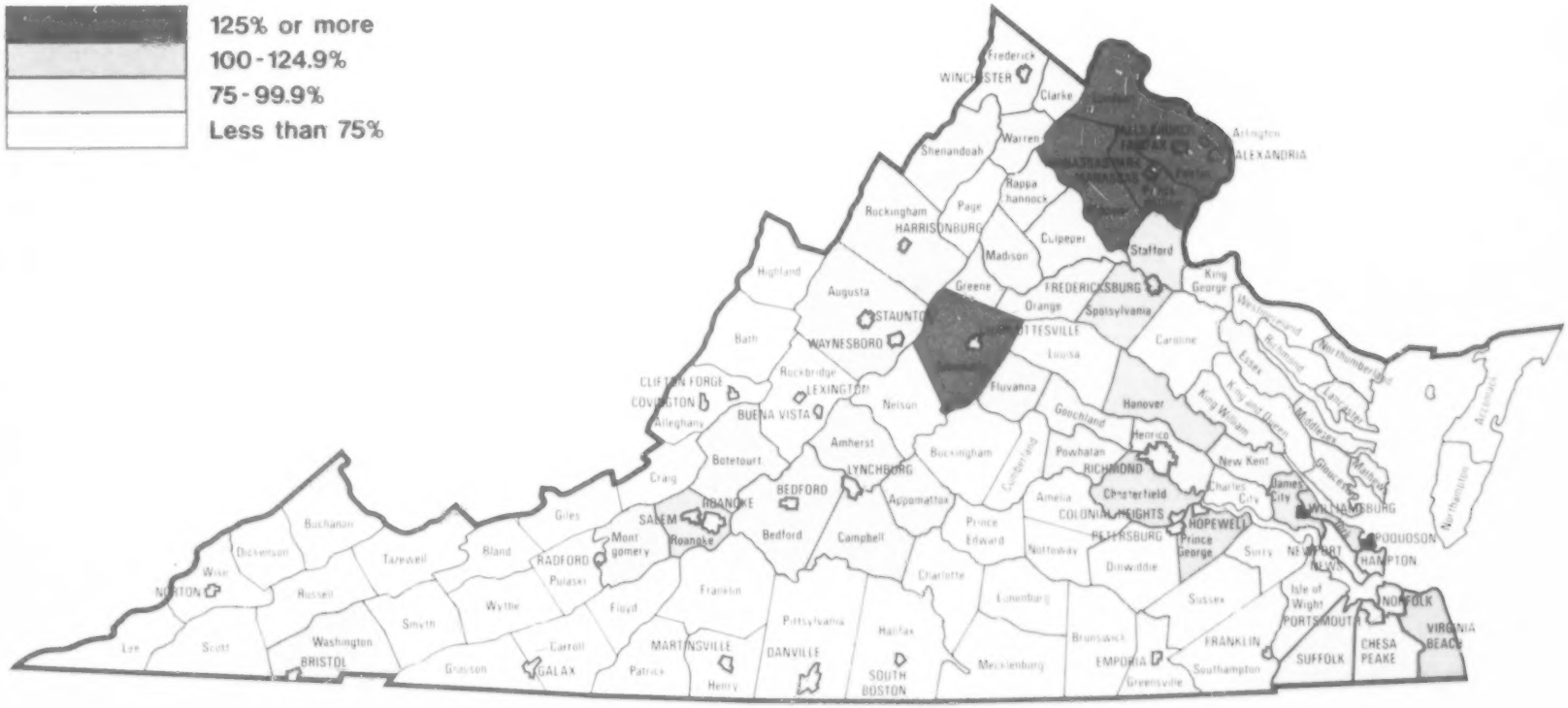


Table 20. Median Housing Values in Virginia Localities and Ranking by Value, 1970 and 1980

Locality	Median Value		Percent Change (Current $)	Percent Change (1970 $)	Ranking	
	1970	1980			1970	1980
Counties:						
Accomack	$ 6,900	$26,300	281.2	79.6	132	129
Albemarle	25,300	60,800	140.3	13.2	7*	11
Alleghany	14,400	33,000	129.2	8.0	51	90*
Amelia	13,900	32,600	134.5	10.5	55	96
Amherst	15,300	36,200	136.6	11.5	44	71
Appomattox	12,000	33,200	176.7	30.4	76*	89
Arlington	29,400	92,900	216.0	48.9	4	3
Augusta	13,600	40,500	197.8	40.3	58*	48*
Bath	8,300	28,100	238.6	59.5	125	115*
Bedford	12,400	40,600	227.4	54.3	71*	47
Bland	7,100	31,200	339.4	107.1	131	104*
Botetourt	11,800	43,100	265.2	72.1	81*	40*
Brunswick	9,400	26,900	186.2	34.9	116*	122*
Buchanan	7,200	30,800	327.8	101.6	130	107
Buckingham	7,900	25,600	224.0	52.7	127	134
Campbell	15,800	39,700	151.3	18.4	36*	53*
Caroline	10,400	34,500	221.7	56.3	101*	82
Carroll	9,100	27,400	201.1	41.9	120	117
Charles City	6,700	27,200	306.0	91.3	133*	118
Charlotte	8,500	26,600	212.9	47.5	123*	125*
Chesterfield	20,800	54,400	161.5	23.2	12	16
Clarke	15,400	43,600	183.1	33.4	41*	36
Craig	10,400	32,000	207.7	45.0	102*	101
Culpeper	16,000	45,600	185.0	34.3	34*	30
Cumberland	10,700	31,100	190.6	37.0	98	106
Dickenson	6,700	26,600	297.0	87.1	134*	126*
Dinwiddie	13,800	35,900	160.1	22.6	56	74
Essex	13,500	39,600	193.3	38.2	60*	55*
Fairfax	35,300	95,200	169.7	27.1	1	1
Fauquier	18,500	66,800	261.1	70.2	19	8
Floyd	12,000	33,700	180.8	32.3	77*	86*
Fluvanna	16,300	36,800	125.8	6.4	32	68
Franklin	13,400	35,100	161.9	23.4	62	78*
Frederick	17,800	45,000	152.8	19.1	23*	31*
Giles	11,500	31,200	171.3	27.8	87*	105*

Table 20. (continued)

Locality	Median Value		Percent Change (Current $)	Percent Change (1970 $)	Ranking	
	1970	1980			1970	1980
Gloucester	15,100	45,800	203.3	42.9	47	28*
Goochland	12,300	43,400	252.8	66.3	73*	38
Grayson	9,500	26,100	174.7	29.5	115	130
Greene	12,300	44,000	257.7	68.6	74*	35
Greensville	8,600	28,700	233.7	57.3	122	113*
Halifax	11,100	28,700	158.6	18.0	94*	114*
Hanover	19,100	52,700	175.9	30.0	15*	17*
Henrico	18,100	47,400	161.9	23.4	20*	25
Henry	13,000	32,900	153.1	19.3	66	94*
Highland	11,800	33,000	179.7	31.8	82*	91*
Isle of Wight	12,000	39,600	230.0	55.5	78*	56*
James City	17,800	52,700	196.1	39.5	24*	18*
King and Queen	10,200	32,300	216.7	49.2	104	100
King George	15,800	46,200	192.4	37.8	37*	27
King William	15,200	41,000	169.7	27.1	45*	44
Lancaster	12,500	40,900	272.2	54.2	69*	45
Lee	5,000	24,100	382.0	127.1	136	136
Loudoun	25,300	71,100	181.0	32.4	8*	6
Louisa	9,400	32,400	244.7	62.4	117*	97*
Lunenburg	9,600	25,900	169.8	27.1	113*	132
Madison	11,800	37,500	217.8	49.8	83*	65
Mathews	12,000	41,600	246.7	63.4	79*	42
Mecklenburg	11,300	27,100	139.8	13.0	91*	120*
Middlesex	10,500	39,400	275.2	76.8	99*	57
Montgomery	14,500	43,100	197.2	40.1	50	41*
Nelson	8,500	26,800	215.3	48.6	124*	124
New Kent	9,900	43,200	336.4	105.6	110*	39
Northampton	7,600	25,200	231.6	56.3	128*	135
Northumberland	10,000	38,200	282.0	80.0	107*	62
Nottoway	10,100	26,000	157.4	21.3	105*	131
Orange	12,800	39,900	211.7	46.9	67	52
Page	11,600	34,100	194.0	38.5	84*	84*
Patrick	10,300	31,300	203.9	43.2	103	103
Pittsylvania	10,100	29,100	188.1	35.8	106	112
Powhatan	11,600	45,000	287.9	82.8	85*	32
Prince Edward	12,300	33,000	168.3	26.4	75*	92*
Prince George	16,900	48,400	186.4	35.0	27*	24
Prince William	24,400	65,000	166.4	25.5	9	9
Pulaski	10,500	32,400	208.6	45.4	100	98*
Rappahannock	9,600	39,100	307.3	91.9	114*	58*

Table 20. (continued)

Locality	Median Value		Percent Change (Current $)	Percent Change (1970 $)	Ranking	
	1970	1980			1970	1980
Richmond	11,100	34,800	213.5	47.7	95*	81
Roanoke	18,800	49,600	163.8	24.3	18	21
Rockbridge	9,300	33,600	261.3	70.3	119	88
Rockingham	13,200	41,100	211.4	46.7	63	43
Russell	8,000	33,700	321.2	98.5	126	87*
Scott	9,900	27,200	174.7	29.5	111*	119*
Shenandoah	12,500	38,600	208.8	45.5	70*	61
Smyth	10,000	29,300	193.0	38.1	108*	110*
Southampton	11,600	35,100	202.6	42.6	86*	79*
Spotsylvania	12,000	48,700	305.8	91.2	80*	22*
Stafford	16,100	55,900	247.2	63.6	33	15
Surry	7,600	26,600	250.0	64.9	129*	127*
Sussex	9,900	26,900	171.7	28.0	112*	123
Tazewell	9,000	35,700	296.7	86.9	121	75
Warren	15,500	40,500	161.3	23.1	39*	49*
Washington	11,300	36,100	219.5	50.6	92*	73*
Westmoreland	10,900	35,600	226.6	53.9	96	76
Wise	6,600	31,600	378.8	125.6	135	102
Wythe	10,000	30,700	207.0	44.7	109*	108
York	20,700	58,500	182.6	33.2	13	13*
Cities:						
Alexandria	27,200	93,300	243.0	61.6	6	2
Bedford	13,700	36,300	165.0	24.9	57	70
Bristol	11,500	33,000	187.0	35.2	88*	93
Buena Vista	11,400	28,100	146.5	16.2	90	116*
Charlottesville	20,400	50,000	145.1	15.5	14	20
Chesapeake	16,000	47,100	194.4	38.7	35*	26
Clifton Forge	11,200	25,800	130.4	8.6	93	133
Colonial Heights	16,900	44,800	165.1	24.9	28*	33*
Covington	10,800	26,600	146.3	16.1	97	128*
Danville	12,400	30,500	146.0	15.9	72*	109
Emporia	14,700	34,100	132.0	9.3	49	85*
Fairfax	31,600	80,500	154.7	20.0	2	5
Falls Church	29,500	89,300	202.7	42.6	3	4
Franklin	15,200	35,400	132.9	9.8	46*	77
Fredericksburg	19,100	48,700	155.0	20.2	16*	23*
Galax	11,500	29,300	154.8	20.1	89*	111*
Hampton	16,600	38,900	134.3	10.4	30*	60
Harrisonburg	18,100	52,600	190.6	36.9	21*	19
Hopewell	14,200	34,900	145.8	15.8	52	80
Lexington	18,100	45,800	153.0	19.2	22*	29*

Table 20. (continued)

Locality	Median Value		Percent Change (Current $)	Percent Change (1970 $)	Ranking	
	1970	1980			1970	1980
Lynchburg	13,500	37,400	177.0	30.6	61*	66
Manassas	24,000	68,000	183.3	33.5	10	7
Manassas Park	15,400	40,200	161.0	23.0	42*	50
Martinsville	14,800	32,400	118.9	3.2	48	99*
Newport News	19,000	44,800	135.8	11.1	17	34*
Norfolk	15,800	39,100	147.5	16.6	38*	59*
Norton	9,400	36,100	284.0	81.0	118*	72*
Petersburg	13,100	34,200	161.1	23.0	64*	83
Poquoson	16,600	60,700	265.7	72.3	31*	12
Portsmouth	13,600	36,600	169.1	26.8	59*	69
Radford	14,100	37,300	164.5	24.7	53	67
Richmond	15,400	37,800	145.4	15.7	43*	64
Roanoke	13,100	32,900	151.1	18.4	65*	95
Salem	15,500	40,700	162.6	23.7	40*	46
South Boston	14,000	27,100	93.6	-8.8	54	121*
Staunton	16,900	40,100	137.3	11.8	29*	51
Suffolk	12,600	38,000	201.6	42.1	68	63
Virginia Beach	21,600	58,500	170.8	27.6	11	14*
Waynesboro	17,300	39,700	129.5	8.1	26	54*
Williamsburg	27,500	61,600	124.0	5.6	5	10
Winchester	17,800	43,500	144.4	15.2	25*	37

* denotes a tie

Table 21. Number of Renter-Occupied Units by Contract Rent, Virginia, 1970 and 1980

Contract Rent	1970		1980		Numeric Change 1970-1980	Percent Change 1970-1980
	Number	Percent	Number	Percent		
Under $50	115,745	23.8	22,594	3.9	-80,135	-69.2
$50-59			13,016	2.2		
$60-79	71,083	14.6	25,629	4.4	-45,454	-63.9
$80-99	56,640	11.7	22,223	3.8	-34,417	-60.8
$100-119	48,470	10.0	30,630	5.2	-17,840	-36.8
$120-149	73,009	15.0	45,465	7.8	-27,544	-37.7
$150-169	59,845	12.3	45,605	7.8	45,064	70.3
$170-199			56,304	9.6		
$200-249	13,056	2.7	95,524	16.3	82,468	631.6
$250-299	9,120	1.9	78,092	13.3	184,724	2,025.5
$300-349			52,512	9.0		
$350-399			31,471	5.4		
$400-499			23,225	4.0		
$500 or more			8,544	1.5		
No cash rent	38,886	8.0	34,376	5.9	-4,510	-11.6
Total	485,854	100.0	585,210	100.0	99,356	20.4

Table 22. Median Contract Rent in Virginia Localities and Ranking by Median Rent, 1970 and 1980

Locality	Median Rents		Percent Change (Current $)	Percent Change (1970 $)	Ranking	
	1970	1980			1970	1980
Counties:						
Accomack	$ 30	$ 69	130.0	8.4	123*	128
Albemarle	125	244	95.2	-8.0	9	10
Alleghany	53	101	90.6	-10.2	71*	102*
Amelia	50	107	114.0	0.0	80*	93
Amherst	61	136	123.0	5.1	51*	60
Appomattox	45	114	153.3	19.4	97*	83*
Arlington	140	293	109.3	-1.4	5	5
Augusta	61	155	154.1	19.7	52*	42*
Bath	45	145	222.2	51.8	98*	58
Bedford	51	127	149.0	17.4	76*	68*
Bland	30	79	163.3	24.1	124*	123
Botetourt	48	125	160.4	22.7	87*	71*
Brunswick	31	60	93.6	-8.8	122	133
Buchanan	30	101	236.7	58.7	125*	103*
Buckingham	30	74	146.7	16.2	126*	126
Campbell	63	150	138.1	12.2	49	52*
Caroline	51	113	121.6	4.4	77*	87*
Carroll	45	106	135.6	11.0	99*	94*
Charles City	30	97	223.3	52.4	127*	110
Charlotte	30	59	96.7	-7.3	128*	134
Chesterfield	98	231	135.7	11.1	17	15
Clarke	54	138	155.6	20.4	68*	59
Craig	30	71	136.7	11.5	129*	127
Culpeper	65	159	144.6	15.3	47	38*
Cumberland	38	86	126.3	6.6	113*	120*
Dickenson	30	100	233.3	57.1	130*	106
Dinwiddie	77	109	41.6	-33.3	31*	92
Essex	46	132	187.0	35.2	93*	63
Fairfax	164	333	103.0	4.3	1	2
Fauquier	82	198	141.5	13.8	26*	24
Floyd	36	99	175.0	29.6	116	107*
Fluvanna	40	131	227.5	54.3	108*	64
Franklin	47	114	142.6	14.3	92	84*
Frederick	66	152	130.3	8.5	43*	48*
Giles	43	102	137.2	11.8	101*	100*

Table 22. (continued)

Locality	Median Rents		Percent Change (Current $)	Percent Change (1970 $)	Ranking	
	1970	1980			1970	1980
Gloucester	67	160	138.8	12.5	40*	37
Goochland	59	123	108.5	-1.8	54*	76*
Grayson	35	78	122.9	5.0	117*	124
Greene	50	154	208.0	45.2	81*	44*
Greensville	30	62	106.7	-2.6	131*	132
Halifax	42	67	59.5	-24.8	104*	130*
Hanover	66	176	166.6	25.7	44*	32
Henrico	112	236	110.7	-0.7	11	13
Henry	50	124	148.0	16.9	82*	73*
Highland	30	166	453.3	160.8	132*	34
Isle of Wight	46	102	121.7	4.5	94*	101*
James City	97	206	112.4	0.0	18	20*
King and Queen	30	96	220.0	50.8	133*	111*
King George	81	159	96.3	-7.5	28	39*
King William	48	93	93.8	-8.7	88*	115*
Lancaster	54	126	133.3	10.0	69*	70
Lee	30	94	213.3	47.7	134*	113*
Loudoun	102	257	152.0	18.7	15	7
Louisa	49	129	163.3	24.1	86	65*
Lunenburg	48	76	58.3	-25.4	89*	125
Madison	35	111	217.1	49.4	118*	90*
Mathews	56	127	126.8	6.9	60*	69*
Mecklenburg	43	68	58.1	-25.5	102*	129
Middlesex	46	124	169.9	27.0	95*	74*
Montgomery	95	200	110.5	-0.8	19	23
Nelson	35	86	145.7	15.8	119*	121*
New Kent	67	155	131.1	9.0	41*	43*
Northampton	30	58	93.3	-8.9	135*	135
Northumberland	34	104	205.9	44.2	120*	97
Nottoway	48	96	100.0	-5.7	90*	112*
Orange	55	150	172.7	28.5	63*	53*
Page	50	113	126.0	6.5	83*	88*
Patrick	42	93	121.4	4.3	105*	116*
Pittsylvania	40	88	120.0	3.7	109*	119
Powhatan	41	154	275.6	77.0	106*	45*
Prince Edward	53	114	115.1	0.0	72*	85*
Prince George	108	221	104.6	-3.6	13	17
Prince William	131	265	102.3	-4.7	7	6
Pulaski	55	134	143.6	14.8	64*	61
Rappahannock	48	122	154.2	19.8	91*	79

Table 22. (continued)

Locality	Median Rents 1970	Median Rents 1980	Percent Change (Current $)	Percent Change (1970 $)	Ranking 1970	Ranking 1980
Richmond	50	113	126.0	6.5	84*	89*
Roanoke	87	217	149.4	17.5	22	18
Rockbridge	59	121	105.1	-3.4	55*	80*
Rockingham	58	150	158.6	21.9	58	54*
Russell	40	116	190.0	36.7	110*	82
Scott	39	91	133.3	10.0	111*	118
Shenandoah	51	123	141.2	13.7	78*	77*
Smyth	51	121	137.3	11.8	79*	81*
Southampton	30	56	86.7	-12.0	136*	136
Spotsylvania	69	205	197.1	40.0	37*	22
Stafford	75	212	182.7	33.2	33	19
Surry	34	101	197.1	40.0	121*	104*
Sussex	38	67	76.3	-16.9	114*	131*
Tazewell	39	133	241.0	60.7	112*	62
Warren	59	148	150.8	18.2	56*	57*
Washington	55	125	127.3	7.1	65*	72*
Westmoreland	57	111	94.7	8.2	59	91*
Wise	37	129	248.6	64.3	115	66*
Wythe	45	106	135.6	11.0	100*	95*
York	92	235	155.4	20.4	21	14
Cities:						
Alexandria	141	306	117.0	2.3	4	4
Bedford	59	114	93.2	-8.9	57*	86*
Bristol	56	124	121.4	4.4	61*	75*
Buena Vista	52	106	103.8	-3.9	74*	96*
Charlottesville	104	206	98.1	-6.7	14	21*
Chesapeake	69	181	162.3	23.6	38*	30
Clifton Forge	55	99	80.0	-15.2	66*	108*
Colonial Heights	94	191	103.2	-4.2	20	25
Covington	55	94	70.9	-19.5	67*	114*
Danville	53	103	94.3	-8.4	73*	98*
Emporia	46	83	80.4	-15.0	96*	122
Fairfax	154	313	103.2	-4.2	2	3
Falls Church	145	346	138.6	12.4	3	1
Franklin	50	92	84.0	-13.3	85*	117
Fredericksburg	79	188	138.0	12.2	29*	27
Galax	43	98	127.9	7.4	103*	109
Hampton	99	190	91.9	-9.6	16	26
Harrisonburg	68	163	139.7	13.0	39	35
Hopewell	82	161	96.3	-7.5	27	36
Lexington	64	129	101.6	-5.0	48	67*

Table 22. (continued)

Locality	Median Rents		Percent Change (Current $)	Percent Change (1970 $)	Ranking	
	1970	1980			1970	1980
Lynchburg	66	154	133.3	10.0	45*	46*
Manassas	135	252	86.7	-12.0	6	9
Manassas Park	117	241	106.0	-2.9	10	11
Martinsville	56	123	119.6	3.5	62*	78*
Newport News	83	183	120.5	3.9	23*	29
Norfolk	83	172	107.2	-2.3	24*	33
Norton	54	151	179.6	31.8	70*	50*
Petersburg	60	151	151.7	18.6	53	51*
Poquoson	77	229	197.4	40.2	32*	16
Portsmouth	62	149	140.3	13.2	50	56
Radford	71	158	122.5	4.9	36	41
Richmond	79	177	124.0	5.6	30*	31
Roanoke	73	150	105.5	-3.2	35	55*
Salem	83	184	121.7	4.5	25*	28
South Boston	41	101	146.3	16.1	107*	105*
Staunton	67	152	126.9	6.9	42*	49*
Suffolk	52	103	98.1	-6.7	75*	99*
Virginia Beach	127	256	101.6	-5.0	8	8
Waynesboro	74	154	108.1	-1.9	34	47*
Williamsburg	112	239	113.4	-0.6	12*	12
Winchester	66	159	140.9	13.5	46*	40*

* denotes a tie

Figure 14.
Change in Median Contract Rent in Constant 1970 Dollars by Locality, 1970-1980

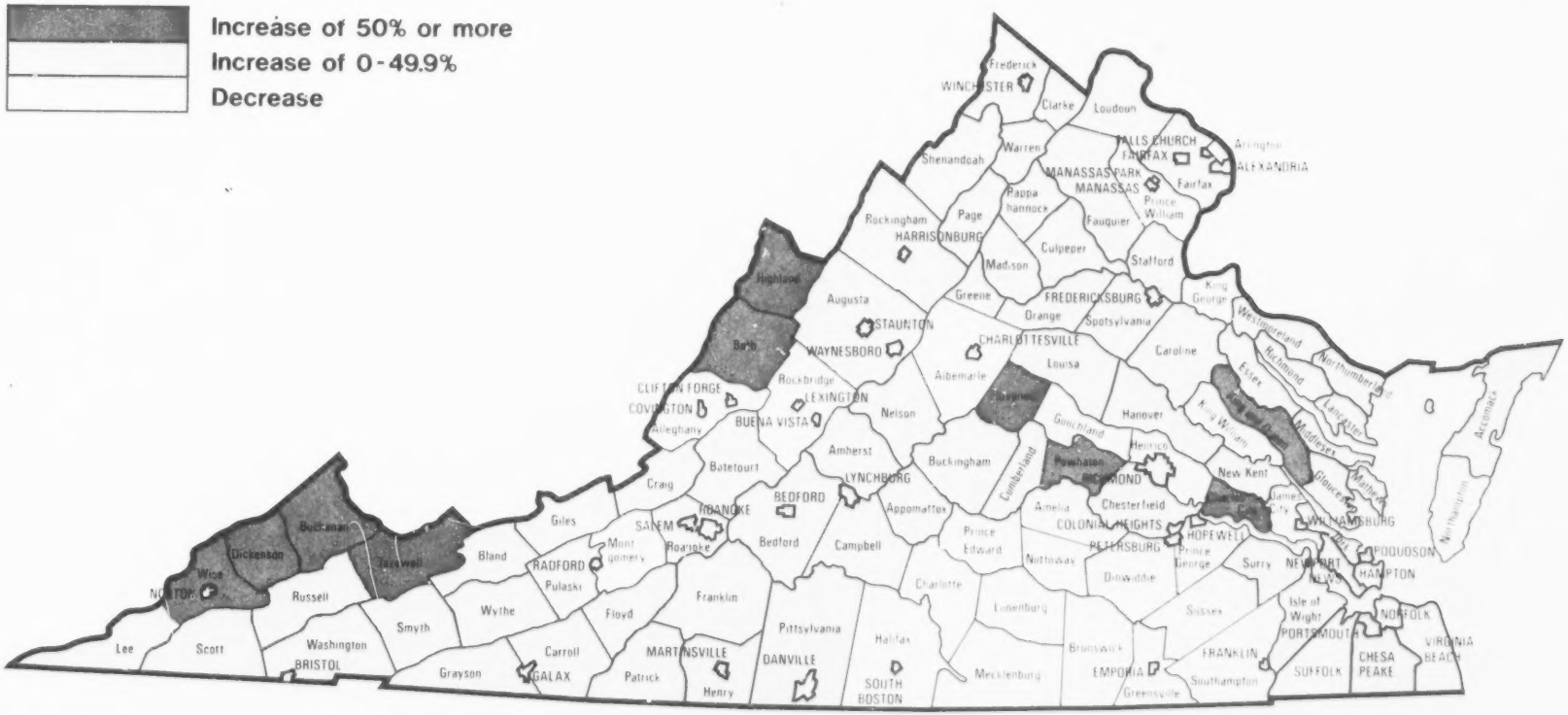


Figure 15.
Median Housing Value and Median Contract Rent, Virginia, 1940 - 1980

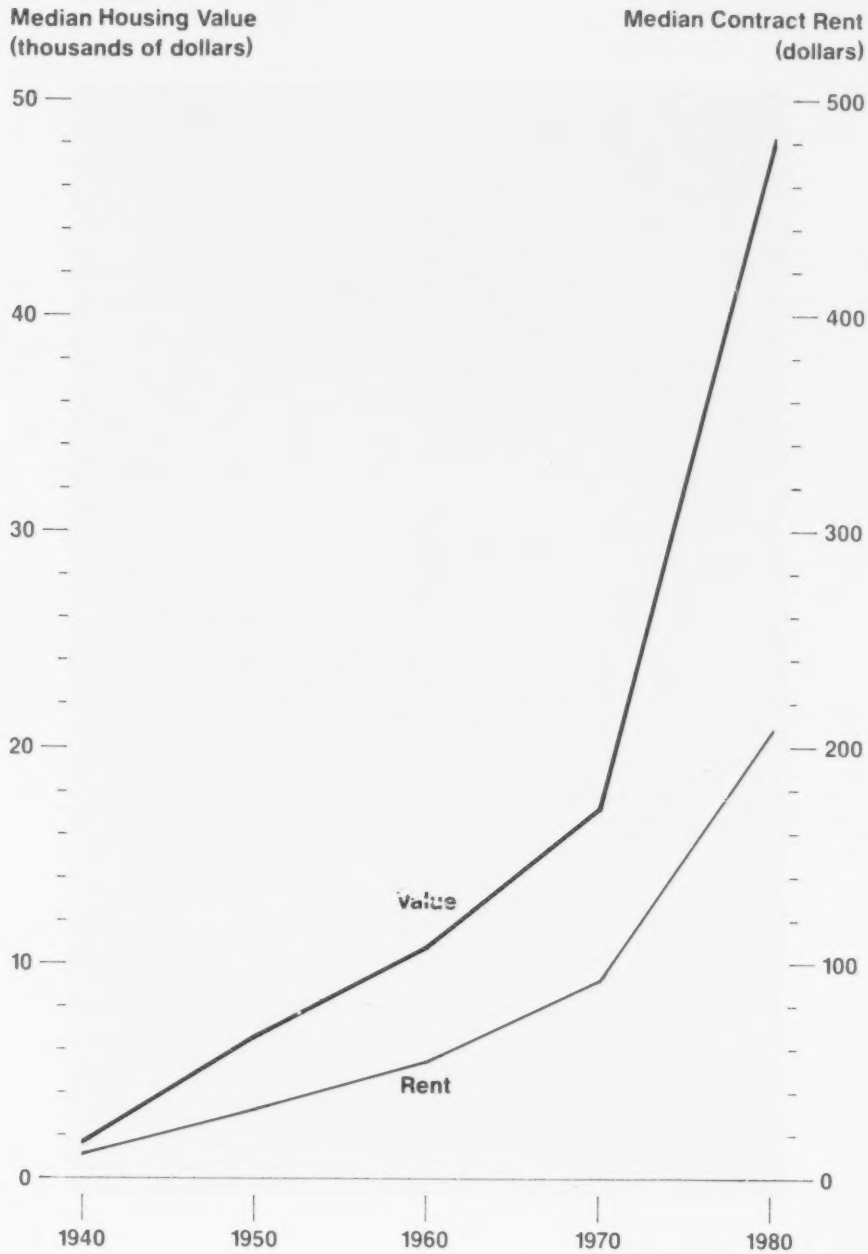


Table 23. Monthly Cost of Owning* and Renting** as a Percentage of Household Income, Virginia, 1980

Percentage of Income	Owner-Occupied		Renter-Occupied	
	Number	Percent	Number	Percent
Less than 20 percent	557,973	59.2	200,117	36.5
20 to 24 percent	127,101	13.5	86,229	15.7
25 to 34 percent	136,979	14.5	106,288	19.4
35 percent or more	120,639	12.8	155,348	28.4
Total	942,692	100.0	547,982	100.0

* Includes the sum of payments for mortgages, deeds of trust, or similar debts on the property; real estate taxes; fire and hazard insurance; utilities (electricity, gas, and water); and fuels (oil, coal, kerosene, etc.).

** Includes the sum of the contract rent plus the estimated average monthly cost of utilities and fuels (gross rent).

Table 24. Cost of Homeownership, Virginia, 1970 and 1980

Characteristic	1970	1980	Percent Change (Current $)	Percent Change (1970 $)
Median Housing Value	$17,200	$48,000	179.1	31.5
Estimated monthly cost* at constant 8.5% mortgage interest rate	$105	$293	179.1	31.5
Estimated monthly cost** given rise in interest rate in 1980 to 12.5%	$105	$410	290.0	87.6

* Assumes a downpayment of 20 percent applied against the median housing value and an interest rate of 8.5 percent in both 1970 and 1980 on a 30-year loan. The estimated monthly cost reflects the monthly principle and interest payment and excludes taxes, insurance, and utility costs.

**Assumes a downpayment of 20 percent applied against the median housing value and the prevailing interest rates of 8.5 percent in 1970 and 12.5 percent in 1980 on a 30-year conventional loan. The estimated monthly cost reflects the monthly principle and interest payment and excludes taxes, insurance, and utility costs.

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[1] U. S. Department of Commerce, Bureau of the Census, General Housing Characteristics, Virginia, 1980.

[2] U. S. Department of Commerce, Bureau of the Census, Statistical Abstract of the United States, 1984.

[3] Anthony Downs, Rental Housing in the 1980s, The Brookings Institute, 1983.

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